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ABSTRACT

This study investigated the post-school adjustment of mildly handicapped twelfth-grade students 2 years after they graduated or left high school. Two types of handicapped individuals were interviewed: 65 students in self-contained, vocational education programs and 46 students in resource programs. Students in both groups had unemployment rates comparable to their normal peers on the national and state level. On the local level, however, the unemployment rate of the handicapped individuals was almost twice as high as their nonhandicapped peers. Handicapped males were more likely to be employed than their female counterparts. Respondents who had summer jobs or other work experiences during the year were more likely to be employed than those who did not have these work experiences. Most handicapped individuals in both groups were satisfied with their jobs and relied heavily upon a "self-family-friend" network to find employment. Most handicapped individuals were single, resided with their parents, engaged in a variety of social activities with friends and family members, and expressed satisfaction with their social life. The majority of handicapped respondents reported that they had not pursued postsecondary training or education. An appendix contains the survey instrument. (JDD)

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A TWO YEAR FOLLOW-UP STUDY OF THE POSTSECONDARY ADJUSTMENT OF MILDLY HANDICAPPED STUDENTS WHO RECEIVED A RESOURCE OR VOCATIONAL DEVELOPMENT WORK STUDY PROGRAM

by

David Joseph Scuccimarra

Dissertation submitted to the Faculty of the
Graudate School of the University of Maryland in
partial fulfillment of the requirements for the degree of
Doctor of Philosophy
1987

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CHAPTER 1

Introduction

Chapter 1 is divided into seven sections. The first section, statement of the problem, provides background information concerning the topic and a rationale for the study. Section two states the purpose. Section three discusses the research questions which were addressed and section four lists the operational definitions used in this study. The fifth section discusses the importance of the study. Section six reviews the study's limitation while section seven provides a synopsis of the organization of the study.

Statement of the Problem

The purpose of this study was to investigate the postschool adjustment of mildly handicapped 12th grade students two years after they graduated or left high shool. The study solicited information from the handicapped respondents regarding their employment outcomes and social intergration into their community. Employment outcome data included employment status, satisfaction with their job and high school program, and the network by which they obtained jobs. Social integration data included marital status, place of residence and preference, social activities, possession of a driver's license, and satisfaction with their social life.

The rationale for this study was based upon the legislative mandates for follow-up regarding handicapped program completers and leavers as well as the lack of follow-up data currently available concerning the postschool adjustment of handicapped individudals. The statement of the problem is divided into three sections.

The first section provides background information regarding the problem. The second section discusses the legislative mandates and their impact on follow-up studies. The last part addresses follow-up issues and concerns.

Background

Increasing concern has been raised by parents, educators, and rehabilitation professionals regarding the plight of handicapped students once they graduate or leave school programs (Hasazi, Gordon, & Roe, 1985). Each year more than 250,000 handicapped students leave publicly supported programs seeking employment and are often frustrated by their inabiliity to do so (Will, 1984). Although "qualification for employment is an implied promise of American education, ... between 50 and 80 percent of working age adults who report a disability are jobless "(Will, 1984, p.1). Over 30 million people in the United States are disabled. Of the 11 million disabled who are potentially employable only 4.1 million are employed. Eighty-five percent of these individuals earn less than $7,000 per year and 52% earn less than $2,000 per year (Ianacone & Tilson, 1983). The cost of disability joblessness and dependency is staggering. Approximately eight percent of the gross national product is allocated each year to disability programs, with most of that amount covering the cost of programs that support dependency such as disability benefits (White House Working Group on Disability Policy, 1983).

In light of these data, the transition of handicapped youth from school to work and adult life has emerged as a major issue. "With the amendments to the U. S. Public Law 94-142 legislation that were passed in 1983 (U. S. Public Law 98-199) and the initiatives included in the

1984 Vocational Education Act (PL 98-524), Congress has opened a new decade of opportunities in the area of employment for handicapped individuals, focusing on transitional services "(Cobb & Danehey, 1985, p.2). Transition programs may provide the means by which the cycle of dependency may be broken and full community participation may be realized by the handicapped. Yet one of the major issues confronting researchers, policy makers, and service providers in attempting to meet the transitional needs of the handicapped youth is the paucity of information regarding these youth once they leave or graduate from high school (Donnellan, 1984). Little is known about handicapped young adults and their interface with the world of work following high school or their integration within their community. Many of the studies which investigated the postschool adjustment of handicapped youth were conducted in the 1960's and 1970's prior to the passage of legislation which opened access to public education, including vocational education.

Legislative Mandates

Within the past two decades legislation regarding both the education of the handicapped and vocational education has intensified the emphasis on efficacy of vocational programs as a means of providing greater career opportunities for the handicapped. Four key pieces of legislation, the Vocational Education Act of 1963 (U. S. Public Law 88-210), the Rehabilitation Act of 1973 (U. S. Public Law 93-112), the Education for All Handicapped Children Act of 1975 (U. S. Public Law 94-142) and the Educational Amendments of 1976 (U. S. Public Law 94-482) made a profound impact upon the vocational education of handicapped students.

Historically, the term "special needs" can be traced to the Vocational Education Act of 1963. This act was the first to define the term as meaning those individuals identified as disadvantaged or having handicapping condition that would prevent them from succeeding in a traditional educational program. Specifically, the Act authorized federal grants to assist in maintaining, improving, and extending existing vocational education programs as well as developing new ones. In particular, it provided those persons with special education handicaps ready access to vocational training and retraining. Later, the Vocational Amendments of 1968 (U. S. Public Law 90-576) designated funds specifically for special needs students who were identified by two main categories: the disadvantaged and the handicapped. These amendments also defined the handicapped as individuals who were unable to learn successfully because they were mentally impaired, visually disabled, had speech, hearing, or other health impairments, or were multihandicapped.

Section 504 of the Rehabilitation Act of 1973 made it illegal for recipients of federal funds to discriminate against qualified individuals solely on the basis of their handicapping condition in hiring practices or admission into a vocational education program. The passage of the Education for All Handicapped Children Act of 1975 required every state to provide a free and appropriate education, including vocational education programs, for all handicapped children between the ages of three and twenty-one.

The next major piece of vocational education legislation supporting the handicapped population was the Vocational Education Amendments of 1976. Title II of these amendments legislated equal access to vocational

education programs for handicapped youth and adults. The 1976 amendments expanded the funding formula for special needs programs and services. To help defray the excess costs of providing educational programs to those individuals identified as handicapped, 10% of vocational education funds were set aside.

These "civil rights" legislations when viewed together, guaranteed educational opportunities for handicapped youth including access to vocational education programming. Three of these laws, the Vocational Education Act of 1963 (U.S. Public Law 93-112), the Education for All Handicapped Children Act (U.S. Public Law 94-142), and the Educational Amendments Act of 1976 (U. S. Public Law 94-482) also focused upon the need for evaluation and follow-up data and information. The passage of the Vocational Education Act of 1963 initiated an intensive effort to systematically conduct follow-up studies of former vocational students at both the state and local levels. Current impetus for conducting follow-up studies of former vocational students stemmed from the passage of subsequent legislation, particularly the Vocational Educational Amendments of 1976 (U. S. Public Law 94-482) which emphasized the need for conducting and improving follow-up studies of vocational education completers, those who graduated; leavers, those who exited from school at 18 or older without graduating; and dropouts, those who exited school prior to age 18 without graduating. Section 112 (b) mandated evaluation of the effectiveness of each vocational program. Mandates for evaluation of programs and services for the handicapped population were also found in the Education for All Handicapped Children Act of 1975. Section 1413 (a) (11) stipulated that each state's annual program plan for the education of the handicapped must include

procedures for evaluating the effectiveness of a program in meeting the education needs of the handicapped.

This increased emphasis on program efficacy in the current economic atmosphere of fiscal restraint resulted in the close examination of all vocational programming to ascertain their effectiveness. The legislation, particularly the Vocational Education Amendments of 1976, articulated in specific terms the need for evaluation of vocational education programs within each state. Section 104.402 stated that each State Board must evaluate in quantitative terms the effectiveness of each formally organized program or project supported by federal, state, and local funds. This evaluation program was funded as part of the State Plan. Although the mandate for evaluation was clearly stated, the procedures and methods for such an endeavor had not been specified by the legislation. Consequently, the need for a systematic, methodologically sound means of evaluation emerged as a major concern.

Follow-up Issues and Concerns

The need for follow-up studies of the handicapped gained prominence due to legislation which gave this population greater access to vocational education programs. This increased accessibility necessitated the need for sound and rigorous follow-up of these handicapped individuals who participated in vocational programming. Follow-up is needed to accurately assess the efficacy of such programs in meeting the unique needs of the handicapped and also to determine the impact of the program on the employment status of the handicapped. From a broader perspective follow-up is needed to fill the void documented in the literature regarding the vocational and social postschool adjustment of handicapped youth. This information seems

crucial in light of the legislative mandates which expanded and refined the educational opportunities for this population. Researchers need to address the postschool adjustment of handicapped youth in terms of their employment status and social integration within the community. This body of knowledge is vital if researchers, policy makers,and service providers are to better address the transitional needs of handicapped youth. Only by addressing these transitional needs and attempting to meet them can society assist the handicapped in becoming productive and self-sufficient citizens.

During the past two decades, major changes in the organization and delivery of educational and social services to the handicapped have taken place. These changes reflected the growing acceptance among professionals of the "normalization" philosophy (Hasazi, Gordon, Roe, Finck, Hull, & Salembier, 1985). In accordance with this philosophy, school and community programs for the handicapped have changed. Independence and social integration of the handicapped have become the ultimate goals of programming. Concern with these goals has fostered greater integration of handicapped students into the full spectrum of educational options including vocational education. These changes in programming may have produced a generation of handicapped students who may differ significantly from those of previous generations (Hasazi et al., 1985a). The question of whether this generation of handicapped adults has achieved a higher level of independence and social integration in their employment and living situations has important implications for the evaluation of special education and other support services provided to them (Moon & Bale, 1984; Wilcox & Bellamy, 1982). The question remains unanswered. Since the 1970's few follow-up

studies have addressed the postschool adjustment of handicapped youth. Presently, only two studies, the Colorado State Follow-Up Study (Mithaug, Horiuchi, & Fanning, 1983) and the Vermont State Follow-Up Study (Hasazi, Gordon, & Roe, 1985), have attempted to address the question of postschool adjustment from the perspective of employment status. The results of these studies will be discussed in greater detail in Chapter 2.

The past decade has also brought about other changes which impact handicapped youth from a vocational education perspective. The advent of the aforementioned legislation mandated the evaluation of vocational education programs within a state using statistically valid sampling techniques. In this context, evaluation was viewed as a tool to comply with federal regulations. As the importance of vocational training became more fully recognized and vocational educators were held more accountable for their actions, the need for precise and accurate documentation confirming program efficacy became imperative (Franchak & Spirer, 1978). Concomitant with the concern to ascertain program efficacy was the need to expand the definition of evaluation to include follow-up as a subactivity that facilitated intelligent decison-making (Edwards, Guttentag, & Snapper, 1975).

Several recent studies pinpointed the paucity of follow-up information of handicapped individuals as a major concern of researchers. A study undertaken by the National Center for Research in Vocational Education concluded that "the field is woefully void of student and employer follow-up which would reveal employment status of former special needs students, earnings, advanced education or satisfaction with employment" (Phelps, 1982, p. 14). Flynn (1982) also

recently concluded:

> Given the billons of dollars spent annually on vocational education of all types it has indeed been sobering to find so few well-conducted outcome studies. There exist a few experimental evaluations (including Azrin & Philip, 1979, Datta, 1980, and Masters & Maynard, 1980) and some necessarily less conclusive nonexperimental assessment (p. 60).

Mertens, Seitz, and Cox (1980) found that of the 655 evaluations reviewed few studies examined the impact of vocational education on special needs populations. This conclusion was reconfirmed by the findings of the National Academy of Science Study "Assessing Vocational Education" (1976) and the recommendations of the "Hearing on the Reauthorization of the Vocational Education Act of 1963" (1982) which suggested that research studies in the area of follow-up should be undertaken to attempt to ascertain program efficacy and the impact of vocational training in general. Again, Flynn (1982) concluded:

> In current advocacy efforts aimed at improving the access of handicapped and disadvantaged students to conventional vocational education the question of access should not be allowed to obscure that of effectiveness... In many key instances assuming the efficacy of conventional vocational education (particularly at the high school level) has, in actuality, but a tenuous empirical basis at best and in some cases (e.g., for young men) may be largely invalid. Hence, while continuing to promote increased access --on ethical grounds --advocates should become much more tough-minded about outcomes --on empirical grounds --and should

certainly not expect major automatic gains from current forms of traditional vocational education... the common assumption that many handicapped and disadvantaged students are in special need of vocational education and are especially likely to profit from it has received, to date, little empirical analysis or support (p. 59)

In November, 1983, a Washington Metropolitan Area School System hosted the eleventh "Pathway to Employment Conference" sponsored by the President's Committee on Employment of the Handicapped. Over 100 area professionals participated in this one day brainstorming session. A frequent concern voiced in this meeting was the need for high quality follow-up information about handicapped completers of vocational education programs.

More recently, the Committee on Youth Development (1983) of the President's Committee on Employment of the Handicapped, in summarizing the conclusions of five "Pathways to Employment" meetings around the country, also touched upon this area of need:

> Issue # 4 --As we move in the direction of improving our pre-work instructional programs for handicapped youth we must be ever mindful of closely matching the school currriculum with actual employment opportunities in the community. An assessment of these needs should be undertaken and periodically updated. One way to facilitate this task would be to form a special task force of area employers and school personnel to meet periodically on this subject. <u>In addition, this group or task force might also survey our post school handicapped population to learn how well they have fared and what they might suggest in terms of career related</u>

instruction (p. 12, emphasis added).

At the state level, members of the Management Information and Accountability for Vocational Education Branch of the Maryland State Department of Education suggested that there currently were no follow-up studies of special needs students available. At the present time follow-up seems to have been confined to efforts by a few local education agencies, and usually involved attempts by vocational support service teams based at the technical schools. The results of these small scale studies were not available in publicly accessible data bases.

There is also a paucity of current research data regarding the social outcomes of post high school handicapped students as will be seen in the review of literature. Recent studies have not addressed a number of postschool adjustment issues including place of residence, marital status, legal infractions, level of social activities, life satisfaction, and use of community resources (Edgar, 1985). Without such information the extent of the postschool adjustment of special education students cannot be fully comprehended.

The previous discussion suggested the problem of this study, namely, that few follow-up data are available regarding the current employment status and postschool adjustment of handicapped students who were enrolled in vocational education programs and those who were enrolled in other non vocationally oriented programs.

Specifically, the problem of this study was to collect data regarding the employment outcome and social integration of mildly handicapped individuals who were in the 12th grade in the 1983-84 academic year in a county school system which is part of the Washington

Metropolitan area. Little follow-up data were available concerning two types of former handicapped students, Level IV, self-contained students who participated in a workstudy program and Level I-III resource students who were mainstreamed into the regular education program and did not participate in a workstudy program.

Statement of the Purpose

Thus, to date, follow-up studies seem to have been conducted in a scattered and nonsystematic fashion, despite the clearly identified need for such information.

The purpose of this study was to describe the employment status of handicapped respondents, their satisfaction with their job if employed and their satisfaction with their high school program. Futhermore, the study determined the network by which jobs are obtained as well as provide data regarding the social integration of the handicapped student into the community. Since little is known about handicapped youth and their interface with the world of work following high school, a major goal of this research was to provide vocational follow-up data and other pertinent information which is needed to fill the void documented in the current vocational literature. The development of such a follow-up study will also make systematic procedures available for future evaluative studies. Such data might assist the local educational agencies in making decisions regarding the development and improvement of educational programming. From a larger perspective, this follow-up responds to the need for evaluation in compliance with federal regulations.

Specifically, the purpose of this study was to collect data regarding the employment outcome and social integration of mildly handicapped individuals who were in the 12th grade in the 1983-84 academic year in a county school system which is part of the Washington Metropolitan area. The study investigated two types of handicapped individuals, those who received Level IV, self-contained special educations services and those who received Level I-III special education resource services. Level IV, self-contained individuals, participated in a special vocational development workstudy program. During the 11th and 12th grade, level IV students were placed in a variety of supervised job experiences for four class periods daily. Students in Level I-III were placed in a regular education academic program in which they received resource support. Level I-III students did not participate in any workstudy program.

Research Questions

The statement of purpose above will be examined through an analysis of the following research questions:

1. The present study will describe the demographics of postsecondary handicapped respondents. It will include the following variables: (a) sex, (b) race, (c) manner of exit from school, and (d) parental occupation.

2. What is the employment outcome of postsecondary handicapped respondents? The study will describe the (a) current employment status, (b) wages, (c) type of employment, (d) length of employment and (e) the network these individuals individuals used in securing employment.

3. What is the job satisfaction and satisfaction with high

school training of postsecondary handicapped respondents?

4. What type of work experiences and training outside of the high school curriculum did these handicapped respondents receive prior to leaving high school and what types of training did they pursue after high school?

5. What is the postschool social adjustment of postsecondary handdicapped respondents who were in the 12th grade in 1983-84? The following variables are included: (a) marital status, (b) residential status, (c) types of social activities and their frequency, (d) friendship patterns (e) possession of driver's licenses, and (f) satisfaction with their social life.

These questions were examined for two types of former handicapped students, Level IV, self-contained classroom students, and Level I through III mainstreamed students.

Operational Definitions

Listed below are definitions of some key terms that appeared in the research questions and procedural portion of this proposal.

Employment

This study used the Current Population Survey's (CPS) and the Bureau of Labor Statistics' (BLS) definition of employment. Employed subjects were defined as those who "during the [reference period] did any work for pay or profit (a mininum of one hour's work) or worked 15 hours or more as an unpaid worker in a family enterprise and subjects who were not working but who had jobs from which they were temporarily absent for noneconomic reasons such as illness, weather, vacation, or labor management dispute"(Statistical Abstract

of the United States, 1985, p.388).

Employment was defined as being engaged in meaningful work for wages or profit either on a full time or part-time basis, and may be either subsidized or unsubsidized.

Full time employment. Full time employment was defined as meaningful work for wages in which an individual works for 35 hours or more per week.

Part-time employment. Part-time employment was defined as meaningful work for wages in which an individual works for less than 35 hour per week.

Seasonal employment. Full time or part-time employment which was available only during specific seasons of the year or holidays. Examples of seasonal employment included lifeguarding, gardening, lawn maintenance, landscaping, and construction.

Subsidized employment. Subsidized employment was defined as work organized by a social service agency in which part of the wages for an individual were provided by the state or federal government.

Temporary employment. Full time or part-time employment contracted by the employer for a limited period of time. The duration of temporary employment may be several days to several weeks dependent on the employer's need to complete contracted work.

Employment Outcome

Employment outcome was defined as whether or not an individual is engaged in work whether subsidized or unsubsididized for mininum wage or better either in a fulltime or parttime capacity for six months or longer.

Positive employment outcome. Positive employment outcome was

defined as the engagement of an individual in work whether subsidized or unsubsidized for minimum wage or better either in a full time or part time capacity for a duration of at least six months or longer. Aspects of positive employment outcome included the following: full time, part-time, seasonal, subsidized, and temporary employment.

Negative employment outcome. Negative employment outcome was defined as in terms of an individual's inability to meet the criteria for a positive employment outcome.

Handicapped

> Public Law 94-142 defines the handicapped as ...those individuals who have been evaluated appropriately as being mentally retarded, hard of hearing, deaf, speech impaired, visually impaired, seriously emotionally disturbed, orthopedically impaired, other health impairment, deaf-blind, multihandicapped, or as having specific learning disabilities, who because of those impairments need special education and related services (U.S. Federal Register, Vol 42, no 163, August 23, 1977, p. 42478).

Level of Service

The level of service was defined as the amount of intervention in hours per school day of Special Education services for a child. There were four levels of intervention: level I, level II, level III, and level IV.

Level I special education services. Level I described a diagnostic/prescriptive service. A level I student was in the regular education program but was receiving supplementary services in the form of direct consultation to the teacher and/or special materials or equipment.

Level II special education services. Level II described an itinerant service. The student remained in the regular education program but received service through the special education program not exceeding an average of one hour per school day.

Level III special education services. Level III, resource support, described a student receiving special education services not exceeding an average of three hours per school day.

Resource support services (Multi-level program). The Multi-level program was developed as an extension of the junior high school resource program. The purpose of this program is to meet the needs of those students with a history of special education who do not qualify for self-contained (level IV) special education services. The multi-level program uniquely functions to provide special education services within the mainstream of the comprehensive high school curriculum (Handbook for Teachers of Multi-Level Classes, Northern Area Special Education, 1984, p.1). This program services students in levels I through III.

Level IV special education services. Level IV, intensive resource, was used to describe a student receiving special education services for up to six hours per school day in a special class within a regular education facility.

Vocational development education (Workstudy program).

In this program, level IV students received on-the-job supervision from an employment-supervisor and from his/her teacher. Students were currently enrolled in the Vocational Development program. Students were under school supervision while at work and receive school credit depending upon the number of hours successfully performed on an

approved job. This course assists students to: acquire a realistic work experience; develop the skills and personal qualities needed to succeed in the business world; learn to evaluate and improve job performance; and learn to locate, maintain, and if need be, resign from a job.

Not in the Labor Force

This study used the Current Population Survey's (CPS) and the Bureau of Labor Statistic's definition of not in the labor force. The definition is exclusive. All subjects who are 16 years old and older and do not fit into the constraints of the definitions of employed or unemployed are "not in the labor force". These include subjects in school, the ill or disabled who because of their conditions cannot work, and those who keep house (Statistical Abstract of the United States, 1985, p.406) and those who chose not to work are included in this definition.

Skill Level

For the purpose of the study, skill level of occupation was divided into three categories, semi-skilled, skilled and unskilled. These definitions were based on those developed by earlier researchers including Hasazi et al.(1985).

Semi-skilled occupations. Semi-skilled occupations may require three months to two years of vocational preparation. These occupations require a license or exam. Examples include truck drivers, civil service workers, construction workers, carpenters, mechanics, farmers, and stone cutters.

Skilled occupations. Skilled occupations may require two to ten years of skilled training. These occupations require a degree or

certification. Examples include technicans, owner of a company, managers, engineers, or owners of farms.

Unskilled occupations. Unskilled occupations require only short demonstrations of up to three months of training. Examples include farm labor, short order cooks, laborers, house painters, child care workers or sales clerk.

Social Experiences

For the purpose of this study, social experiences are defined in terms of having a driver's license, place of residence, marital status, friendship patterns or networks, participation in social activities such as church attendance, use of the neighborhood recreation center, sports, hobbies, congregating within the neighborhood, and use of community resources.

Unemployment

This study used the Current Population Survey's (CPS) and the Bureau of Labor Statistics' definition of unemployment. The unemployed "comprise all [subjects] who had no employment during the [reference period], who made specific efforts to find a job within the previous 4 weeks and who were available to work... Persons on layoff from a job or waiting to report to a new job within 30 days are also classified as unemployed" (Statistical Abstract of the United States, 1985, p.388).

Importance of the Study

There are several factors which augment the importance of this study. First, the study has methodological importance. The instrument which was developed had a high interrater reliability. Interrelater reliability coefficents ranged from .87 to .94. Consequently, the data collected was reliable and the instrument may be able to be

used for future studies. Second, participants were randomly selected to be interviewed. The results of this study are more likely to be representative of the employment and social outcomes of the handicapped population investigated in this study. Third, systematic procedures were developed by the researcher to insure a high response rate. These procedures included exhausting a network of teachers, friends, former employers, clergy, recreational leaders, and directory assistance in order to locate participants.

Another asset of this study was that it improved upon earlier studies in several ways. As discussed previously, this research used an instrument which had a high interrater reliablilty. Earlier studies used instruemnts but failed to report reliability coefficents. The study also collected data regarding both the employment status of handicapped individuals and their postschool social adjustment and integration withing the communities. Earlier research addressed either the employment data or social data. Few studies collected data on both. This study provides a more well rounded or complete view of the handicapped individual's postschool adjustment.

Limitations of the Study

This study is limited to respondents identified as mildly handicapped who were in the 12th grade in the 1983-84 academic year in a county school system that is part of the Washington metropolitan area. Also this study is limited to the questions regarding the postschool employment and social outcomes of these mildly handicapped individuals and their perceptions of their jobs, high school training and programs, and their social life. No attempt was made to validate their perceptions either through interviewing of family members or

employers. The definition of vocational education is limited to the Vocational Development Workstudy Program. This workstudy program is directed by the department of Special Education and provides supervised job experiences for students. While this study does not address all the problems identified earlier it is viewed as a building block for it provides needed data regarding both the employment and social outcomes of mildly handicapped individuals.

Organization of the Study

Chapter 1 provided an overview of the statement of the problem, the purpose of the study, research questions, operational definitions, limitations of the study and its importance. Chapter 2 presents relevant research studies concerning the topic. Chapter 2 is divided into two sections. The first addresses the legislative mandates involving follow-up. The second section reviews the literature involving the follow-up of handicapped individuals. Chapter 3 discusses the research methodology, procedures, instrument and data analysis. Chapter 4 presents the results of the study. Results are presented separately for former Level IV and Level I-III participants. Chapter 5 provides a summary of the results. Conclusions and implications are also addressed in that chapter.

CHAPTER 2

Review of Literature

In the previous chapter, the topic of this research was introduced and questions regarding follow-up data of handicapped students were posed. An overview of the legislative mandates for follow-up studies as well as the documented void in the literature were provided in Chapter 1. This review of literature explains the legislative mandates in greater detail. It presents the results of follow-up studies regarding social integration and employment outcomes involving handicapped students and summarizes their findings, methodological strengths, and weaknesses.

Chapter 2 is divided into three sections. The first section addresses the legislative mandates and their impact upon follow-up research. The second section discusses follow-up research involving the handicapped. This section has two subdivisions. The first reviews follow-up research regarding the employment outcomes of handicapped individuals. In the second, follow-up research involving the social outcomes and adjustment of handicapped individuals is discussed. The final sections summarizes the research findings and identifies issues which this study addresses.

Legislation and Follow-Up Mandates

"Education for all has been an American goal; however, all individuals have not always been able to participate in public programs" (Nystrom & Bayne, 1979, p.88). The civil rights movement of the 1960's thrust the concern for equal opportunity in education into the national consciousness. Consequently, this concern manifested

itself in the legal arena in the form of additional legislation and litigation to insure that equal opportunity in education was realized by the handicapped. Legislation such as the Education for All Handicapped Children Act of 1975 (U. S. Public Law 94-142); the Education Amendments of 1976 (U. S. Public Law 94-482), which amended the Vocational Education Act of 1963 (U.S. Public Law 88-210); and the Rehabilitation Act of 1973, specifically Sections 503 and 504 (U. S. Public Law 93-112), articulated the civil rights of the handicapped. "The primary goal of these pieces of legislation is to provide the handicapped with effective vocational programming; the anticipated outcome being well adjusted, suitably employed handicapped citizens "(Nystrom & Bayne, 1979, p.89). Collectively, they provided a continuum of services for the handicapped between the ages of three and twenty-one.

The rationale which fostered these legislative enactments was well documented. One of the strongest factors contributing to the rationale for recent legislative mandates was the actual performance record of the handicapped in the work place (Hull, 1976). The President's Committee on the Employment of the Handicapped reported that the work records of the handicapped compared favorably with that of their nonhandicapped peers. Such findings suggested that the handicapped should participate on an individual basis in all types of vocational education. Unfortunately, the handicapped have not experienced parity with the nonhandicappped in terms of the availability of employment and training opportunities in vocational schools as well as in the work place. In a typical year, 40% of all disabled adults were employed compared with 75% of the non-disabled population (Razeghi, 1973).

The average weekly wages of employed disabled males were 22% below those of their non-disabled counterparts parts (Levitan, 1976). Only 1.7% of the total fiscal year 1976 enrollment in vocational education programs was identified as handicapped (Lee, 1975) and, of those students, 70% were placed in separate classes (Olympus Research Corporation, 1974). Statistics such as these supported the expansion of vocational education programs to include more handicapped individuals (Razeghi & Halloran, 1978). Congress responded with legislative enactments formulated to meet the needs of all handicapped individuals.

From an historical perspective, the Vocational Education Act of 1963 (U.S. Public Law 88-210) set a precedent. It coined the term "special needs" and provided ready access to vocational training or retraining to those identified as having special socioeconomic, and other handicapping conditions. Since funds were not earmarked for special needs populations, little was done to service this group. The Vocational Education Amendments of 1968 (U.S. Public Law 90-576) solved this dilemna by addressing the issue of funding. These amendments identified two main categories in the special needs population: the disadvantaged and the handicapped. Twenty-five percent of all vocational education funds were to be divided between those two categories using the following formula, 10% for the handicapped and 15% for the disadvantaged. Vocational programming and services were further expanded to these populations through the passage of the Educational Amendments of 1972 (U.S. Public Law 92-318) which allocated funding and grants to institutions of higher education and to secondary school programs that extended career and occupational education services to students with special needs backgrounds.

Three years later, the rights of the handicapped in the work place received attention under the Rehabilitation Act of 1973. Section 504 affirmed vocational accessiblity for handicapped students. Subpart D established requirements for nondiscrimination in preschool, elementary, secondary, and adult education programs and activities, including secondary vocational education programs. The Office of Civil Rights was entrusted with the responsibility of monitoring compliance with Section 504 regulations.

Section 503 of the Rehabilitation Act of 1973 required that every employer engaged in business with the fedeal government under a contract for more than $2,500 take "affirmative action" to recruit, hire, train, and promote handicapped individuals. The intent was to encourage employers to hire more handicapped employees. The act further stated that federal funds could be used for programs providing occupational training to individuals with academic, socioeconomic, and other handicapping conditions. "If affirmative action is to be fully realized, educators must consider all the options available for training and preparing handicapped students for employment" (Razeghi & Davis, 1979, p. 354). The passage of U.S. Public Law 94-142 which guaranteed free and appropriate education for all handicapped individuals between the ages of three and twenty-one indicated that vocational education should be made available to handicapped students. It provided the following definition of special education:

> The term special education also includes vocational education if it consists of specifically designed instruction, at no cost to the parent, to meet the unique needs of a handicapped student. (Federal Register,

Tuesday, August 23, 1977, Section 121a. 14(a)(35).

In fact the definition of vocational education used in U.S. Public Law 94-142 [Section 121A. 14(b)(31] was taken directly from the Vocational Education Act of 1963, as amended by U.S. Public Law 94-482. Access to vocational education for handicapped students was emphasized in Section 121a.305 which stated that:

> Each public agency shall take steps to insure that the handicapped children have available to them the variety of educational programs and services available to the non-handicapped children in the area served by the agency, including art, music, industrial arts, consumer and homemaking education, and vocational education (Section 121a.305).

The pivotal role of vocational education for the handicapped was solidified by the passage of the Education Amendments of 1976 (U.S Public Law 94-482) which amended the earlier vocational education legislation. Title II of this act specified that 10% of the federal vocational education general funds must be allocated for the vocational education of the handicapped. These set-aside funds must be matched by state and local funds. Additional provisions were made in regard to the expenditures of these funds. To the maximum extent possible, handicapped students were to be placed in regular vocational programs. Monies must also be used for exess costs, namely, expense above and beyond the costs of providing vocational education to nonhandicapped students. An added requirement of U.S. Public Law 94-482 was that those provisions relating to the preparation of the handicapped individuals be consistent and considered in conjunction with U.S.

Public Law 94-142 and Sections 503 and 504 of the Rehabilitation Act of 1973.

This increased focus on the vocational needs of the handicapped coupled with the commitment of funds and the requirement to document expenditures brought program efficacy and program evaluation into the foreground of study. Legislative mandates such as The Education for All Handicapped Children Act, (U.S. Public Law 94-142) and The Educational Amendments of 1976 (U.S. Public Law 94-482) also gave further impetus to and fostered the development of comprehensive, methodologically sound, statistically valid, and systematic follow-up studies to meet the need for program evaluation. "Although the current legislation gives impetus for conducting follow-up studies of former vocational students, previous legislation also provided the focal point or need for follow-up data and information" (Franchak & Spirer, 1978, p. 17). An intensive effort to systematically conduct follow-up studies of former vocational students at both the local and state levels commenced with the passage of the Vocational Education Act of 1963 (U.S. Public Law 88-210). The passage of subsequent legislation, in particular the Education for All Handicapped Children Act (U.S. Public Law 99-192) and the Education Amendments of 1976 (U.S. Public Law 94-482) augmented the need for conducting and improving follow-up studies of vocational education graduates, leavers, and dropouts.

Section 1413(a)(11) of U.S. Public Law 94-142 stipulated that each state's annual program plan for the education of the handicapped must delineate procedures for assessing the effectiveness of a program in meeting the educational needs of the handicapped students. Section 112 (6) of U.S. Public Law 94-482 mandated the need for an evaluation of

each vocational program within a state using statistically valid sampling techniques. Data collected were used to determine the extent to which former vocational students (a) found employment in occupations related to their training, and (b) were considered by their employers to be well trained and prepared for employment (Franchak & Spirer, 1978). Further, the intent for having state and local educational agencies engaged in follow-up studies was also delineated by the U.S. Public Law 94-482 Federal Regulations.

Specifically, Section 104-402 of these regulations required the evaluation of all vocational programs within a five year period as part of the State Law. It mandated that the evaluation of the effectiveness of each formally organized program or project supported by federal, state and local funds be quantitatively substantiated by statistically valid techniques. Included in the definition of the evaluation factors were the following topics which were pertinent to data collected in a follow-up study: (a) planning and operational processes; (b) results of student employment success as measured by rates of employment and unemployment, wages, duration of employment and employer satisfaction with the performance of vocational students as compared with the performance of their peers who have not received vocational services; and (c) other results as measured by services to special populations including women, members of minorities, the handicapped, the disadvantaged and those with limited English speaking ability.

From the preceding federal legislative citations, it was apparent that "the primary purpose for follow-up studies was to increase the state and local education agencies ability to: 1) use the resultant evaluative information to improve programs [and] 2) supply information

to the U.S. Office of Education in reporting the status effectiveness of vocational education to Congress" (Franchak & Spirer, 1978, p. 19). In this context evaluation was viewed as an instrument used to ascertain compliance with federal regulations. Tied to compliance was the issue of program effectiveness or efficacy which suggested to many researchers (Edwards, Guttentag & Snapper, 1975; Franchak & Spirer, 1978; Jemelka & Borich, 1979) the need to expand the definition of evaluation to include follow-up as a subactivity that facilitated intelligent decision-making.

Although program efficacy had always been of interest to researchers, the passage of legislation such as the Education Amendments of 1976 (U.S. Public Law 94-482) specifically Title II brought about major changes in the design, delivery, and evaluation of vocational education throughout the nation (Meers, 1980). Increased attention focused on meeting the occupational development needs of special populations including the handicapped, disadvantaged minorities, women, and individuals of limited English speaking ability. Increased emphasis was placed on the planning and evaluation of local and statewide vocational education programs. Compounding the legislative mandates were the factors of declining financial resources and a fluctuating labor market which caused many educators to be more responsive to the need for evaluation.

In light of legislative mandates and dwindling resources for ever increasing service, the need for valid and reliable evaluation became imperative (Phelps, 1982). Evaluation would be crucial in providing evidence of compliance with civil rights legislation insuring that those who had been given access to vocational education were adequately

and appropriately serviced. Federal and state legislatures, policy makers, and advocacy groups demanded evidence that special populations in question were effectively served. In essence questions of efficacy centered upon the extent to which individuals had been successful in securing employment. The scarcity of financial resources also caused programs to be more carefully scrutinized before tax dollars were appropriated.

The area of follow-up research should be the basis for justifying possible changes in rules and regulations that guided the implementation of programs. New legislative provisions designed to provide incentives for serving special populations might prove to have the adverse effects (i.e., excess costs). "Informed decisions regarding the revisions of regulations can only be made if good impact and follow-up data are available" (Franchak & Spirer, 1979, p. 53). Follow-up information should be critical in assisting educators in improving the processes and products of vocational education. In regard to the special population, follow-up data might provide a critical analysis of the effectiveness of support services thus providing a basis for the long-range improvement and expansion of services and programs.

As a consequence of the emphasis on program efficacy researchers needed to be cognizant of developing sound, methodological, and systematic follow-up research. Researchers needed to address follow-up of special populations with the same statistical sophistication which had been previously reserved for national outcome studies involving the general population. Rigorous methodological procedures need to be utilized to ensure the validity and reliability of research findings.

Since legislation mandated access for the handicapped to a wider spectrum of educational opportunities including vocational education, future follow-up studies must also address the handicapped population more comprehensively. It is to these follow-up studies which attention is now focused.

Review of Follow-Up Studies Involving Handicapped Indivduals

"Follow-up studies may be described as a subsystem of an evaluation schema and one which encompasses the manifestation of action research." (Franchak & Spirer, 1978 p.20). Action research was "the process by which practitioners attempt to study proble-s scientifically in order to guide, direct, and evaluate their decisions and actions..." (Corey, 1953, p.6) and improved their practices. From a broad perspective follow-up was defined simply as the "collection of information about program completers, leavers, and dropouts" (Franchak & Spirer, 1979, p.2) in order to determine the status of a group of interest after some period of time (Gay, 1976). More specifically, vocational education follow-up was defined as:

> an organized plan for ascertaining the employment and educational status of graduates from vocational programs in order to establish the relationship between employment and the vocational training received. (Good, 1973, p. 246).

Over the past fifty years the follow-up survey conducted through a mailed questionnaire or a personal interview was the principle method used to collect information on the graduates of vocational and special education programs.

Although the need for follow-up studies involving the handicapped became a pressing issue with the passage of legislation, such studies

were not new. The social and vocational status of special education programs was a topic of interest since the early 1930's when reserachers such as Fairbanks (1933) and Baller (1936) examined the adjustment of students formerly designated as mentally retarded. Interest in this area of research which continued over the past fifty years resulted in over twenty follow-up studies reported in the literature.

This review of literature is divided into two sections. Section one reviews follow-up studies which investigated the vocational adjustment of handicapped students. Data concerning the employment status, wages, and job satisfaction are highlighted as well as comparative studies of programs and various disabilities. Section two reviews follow-up studies which addressed the social adjustment of handicapped students into the community. Issues of interpersonal relationships, use of community resources, friendship patterns, residential and marital status are discussed.

Follow-up Studies Examining the Postschool Employment Outcomes of Handicapped Individuals

This section examines the follow-up literature involving the handicapped from an historical perspective. A time frame schema, decades, is utilized to reflect the changing trends in the research. Over the past five decades, the scope of follow-up studies which initially focused on the trainable mentally retarded (TMR) broadened to include several other disabling conditions.

Research Prior to 1950. Prior to 1950 three comparative follow-up studies involving educable and trainable mentally retarded persons enrolled in special education classes were undertaken. One of the earliest documented studies was undertaken by Fairbanks (1933) who

investigated a group of 166 individuals. These individuals were assessed as "subnormal" by the Binet-Simon intelligence scale. This group of individuals was originally surveyed by the school district in 1914 as part of a special program. Using the initial survey data, Fairbanks (1933) attempted to locate the 166 individuals 17 years later. Of the 166 individuals originally surveyed she located 122. Fairbanks divided these individuals into three groups according to IQ scores. The first group consisted of 38 individuals with an average IQ score of 61 (trainable retarded individuals). Group II was made up of 30 individuals with an average IQ of 72 (educable retarded individuals). The third group consisted of 54 individuals who had average IQ scores of 72 but were felt by the researcher to "have greater possibilities for efficiency" (Fairbanks, 1933, p.180) although criteria for such categorization were not provided by the researcher. Fairbanks compared these subnormal individuals to a control group of 90 normal individuals also selected from the general survey made in 1914. Criterion for inclusion in the normal group was an IQ of 90 or better. Through an examination of court records and by data gathered on personal interviews, Fairbanks compared the subnormal group and the control group on several variables including, type of occupation, court record, alcoholism, activity in special interest such as sports, and marital status. Using frequency counts, Fairbanks determined that more of the subnormal group were married, had more children, and more divorces than the control group. "Subnormals" also had more affiliations with social agencies than their normal counterparts. More importantly, Fairbanks found that there was little difference between the "subnormal" group and their normal peers in post school adjustment

on gainful employment dimensions. Mithaug and Horiuchi (1983) cite a later study by Kennedy (1948) involving trainable retarded individuals as corroborating Fairbanks' findings.

Contrasting these findings was a study undertaken by Baller in 1936. Baller identified 206 former special education pupils over the age of 21 with average intelligence quotients (IQ) under 71. These pupils were matched for sex, nationality, and age with subjects whose IQs were between 100 and 120. Ninety-five percent of individuals with IQs of 71 and 98% of those with IQs of 100 or better were located and studied. Baller found that the gainful employment for these retarded individuals was 30% lower than that for the normal control group. The socio-economic status of the mentally retarded individual was inferior to that of the control group. Sixty-one percent of the retarded subjects were unable to remain steadily employed over a period of several months. All three studies (Baller, 1936; Fairbanks, 1933; and Kennedy, 1948) ascertained that the mentally retarded graduate was financially dependent on others such as parents and/or relatives for his/her existence.

These early studies focused totally on educable and trainable mentally retarded individuals. The strengths of these studies included their use of a control group of normal individuals for comparison (Baller, 1936; Fairbanks, 1933; and Kennedy, 1948) and a relatively high response or contact rate (Balle, 95% and Fairbanks,73%). Statistically, these studies reported only frequencies of occurence and percentages. Baller (1936) provided a copy of the instrument used but the instrument's validity was not documented. Procedures for data collection were also not provided. Fairbanks (1933) made no comment

regarding instrumentation used in her study. She also failed to define criteria for placement of individuals into group III of her study thus weakening the results. Despite the weaknesses of these studies, it must be noted that these early attempts in follow-up of the mentally retarded strove to gather information not only on the employment status of the individual studied but also on their post school adjustments.

Research in the 1950's. Between 1950 and 1960 the focus of follow-up studies shifted toward the summarization of the employment status of individuals. In 1955 Cassidy and Phelps conducted a follow-up study of 19 special education programs within the state of Ohio. This study was comprehensive because it was one of the few state-wide survey studies undertaken before 1983. Cassidy and Phelps contacted 268 randomly selected educable mentally retarded (EMR) graduates (163 males and 105 females) who had been out of school for approximately four years. Their results indicated that these graduates had an 87% employment rate with 2.3% engaged in skilled labor, 30% in semi-skilled occupations, 34% in unskilled occupations, 20% in service occupations, and 8% engaged in clerical work while the remaining were working a variety of other jobs. The income of these individuals compared favorably with the national average (1955) for comparable jobs. Consequently, the researchers concluded that the special education programs were effective in preparing EMR students for post school employment.

Another researcher, Bobroff (1955) followed 121 randomly selected EMR individuals (92 males and 39 females) who had been out of the Detroit school system for approximately 12 years. Bobroff had two purposes in conducting his study. First, he wanted to explore the post

school activities of a group of adults who were formerly in secondary level classes for the mentally retarded. Second, he wanted to compare the post school adjustment of students who received training in a "special preparatory program" in which the mentally retarded were situated in intermediate, trade, and high schools while participating with other students in vocational courses and those students who received their education in "special B" classes in which the mentally retarded were placed in segregated self-contained classes for all subjects. Comparing both groups on the following variables including employability (defined as the ability to acquire and retain jobs), income, security and assets, chi square statistical analysis revealed no significant differences between the two groups. His findings that 92% were employed, substantiated those of Cassidy and Phelps (1955). His research revealed that of those employed 16.3% were engaged in skilled work, 36.4% in semi-skilled, 29.5% in unskilled, 4.5 % in service occupations and 7.7% worked in clerical positions. Of those surveyed, few EMR individuals (n=4) failed to meet the researcher's criteria for self-sufficiency which was measured in periods of full time employment and responsibilty.

Several other follow-up studies of EMR students (Carriker, 1957; Dinger, 1958) were reported in the late 1950's. The results seemed to corroborate the earlier findings. Carriker (1957) surveyed 49 EMR students in Nebraska who had been out of school for six to ten years, and compared them to a control group of 49 normal students. He found that 86% of the EMR sample were employed compared to 89% of the normal group. Like earlier research Carriker's study indicated that the bulk of those employed were engaged in unskilled labor (75%) with only 4.1%

working in skilled occupations. Dinger, (1958) in a follow-up study of 421 EMR students from Altoona, Pennsylvania, noted that 81% of those surveyed were employed. This was based on the responses of 333 students. As in Carriker's study, Dinger reported that the largest portion of those employed were working in semi-skilled (32%) and unskilled (35%) occupations. Closing the decade was a follow-up by Peterson (1959) of 45 EMR graduates from the Cedar Rapids school system who were compared to 45 normal peers. Of the EMRs surveyed 77% were employed. Of those employed 4.4% worked in skilled occupations 2.1% worked in semi-skilled occupations while 65% worked in unskilled positions. The weekly median wages earned by the two groups were quite dissimilar: females of the retarded group had a weekly median wage of $19.25; females of the comparison group $55.00; retarded males earned $54.85; comparison group males, $89.30. Using the Warner scale, Peterson found that approximately 85% of the EMRs lived in areas that were below average and about 93% lived in substandard housing. There were 10 times more home owners among the comparison group than were found among the retarded. There were two and one half as many unmarried men and three times as many unmarried women in the retarded group than there were in the control group.

During this same time frame one study was undertaken involving trainable mentally retarded (TMR) individuals (Saenger, 1957). In Saenger's study a sample of 520 TMR adults were drawn from a census of 2,640 students formerly in classes for the trainable retarded (40-50 IQ) in New York from 1926-1956. They fared poorly as compared to their EMR counterparts. Of the sample surveyed 73% were unemployed, 66% lived with their parents within the community while 26% were inhabiting

institutions. Seventy-three percent did not participate in post school habilitative program.

The weakness of many of the studies in the 1950's was that their focus was narrow. Only TMR and EMR students were examined. In terms of instrumentation, interview questionnaires which had not been pilot tested were of questionable value. In terms of employment the studies by Dinger (1958), Saenger (1957), and Peterson (1959) reported that students were employed. Unfortunately, no diffentiation was made as to whether the employment was full time, part-time, temporary, or seasonal. There were also no indication in these studies as to the length of time an individual was employed. Consequently, the percentages of retarded individuals reported as employed might in fact be misleading.

Research in 1960's and 1970's. Since the 1960's a number of researchers had analyzed the economic self-sufficiency of the EMR high school graduate. This represented a shift away from earlier research which delineated statistics reflecting the employment status of handicapped individuals and the category of occupation in which they were employed whether skilled, semi-skilled, or unskilled. Two studies, (Dinger, 1961; Peterson & Smith, 1960) found that retarded females outearned their male counterparts by as much as $1,000 per year and that the males earned considerably less than the 1960 poverty level standard of $3,000.

During this time period researchers broadened the spectrum of handicapping conditions studied to include not only the EMR but the hearing impaired. They also examined the efficacy of various programs. Gozali (1972) conducted a survey of 56 EMR students who had

participated in workstudy programs which indicated that only 15% of those surveyed were employed. Of those contacted 45% were married and maintaining their own household, and 55% were unmarried and living at home with their parents. The average income earned by those employed was approximately $3,145 which was well below the poverty level. Six years later Keim (1979) followed 100 mildly retarded individuals who participated in workstudy programs in Cleveland public school and reported 77% were employed at the time of the following contact. A follow-up study conducted by Titus and Travis (1973) surveying 38 EMR students confirmed the findings of relatively low economic self-sufficiency with earnings ranging from $1.40 to $3.45 per hour with a median wage of $2.08. Minimum wage per hour at this time was $1.60.

Interviewing the hearing impaired student population (mean age of 21) Powers and Lewis (1976) found that of the 187 surveyed 83% were single, 87% possessed drivers licenses, 68% maintained part-time jobs, and 66% were satisfied with their high school experiences. A study by Coonley (1980) of mildly retarded graduates in North Kansas investigated the employment status, employment breakdown, and the economic self-sufficiency of those interviewed. He reported that 89% were employed. The employment breakdown included: food services workers (30.3%) assembly line worker (13.7%), clerk (11.5%), maintenance personnel (10.3%), sheltered workshop employer (9.2%) transportation worker (9.2%), welder (6.9%), and those working in the personal services (5.7%).

Mithang and Horiuchi (1983) cite the Dearborn Study (1970) which found that a mainstreamed vocational program correlated more highly than the separate or self-contained program with such postschool

adjustment indicators such as attainment of a full time job, occupational level, salary, additional education, money management skills, the quality of the home, and participation in community activities. These findings were corroborated by one of two later studies. Collister (1975) noted that there were no differences between self-contained and mainstreamed programs when correlated with employability (ability to locate and retain a job). Kernan (1979) conducted a follow-up study of 92 mildly retarded students in New Jersey. His findings were consistent with those of Dearborn (1970) which indicated that type of special education program appeared to have influenced the graduate post school self-sufficiency and the types of jobs held. Mainstreamed vocational programs correlated more highly (r=.85) with post school adjustments than did self-contained programs (r=.65).

Other studies which invesigated the correlation between the type of school program and job success included the work of Boyce and Elzey (1978), Brolin, Durand, Kromer, and Muller (1974), Chaffin, Spellman, Regan, and Davison (1971), and Dinger (1973). In 1971 Chaffin, Spellman, Regan, and Davison conducted two follow-up studies to investigate the postschool adjustment of educable mentally retarded subjects from the Kansas Work Study Program. Thirty subjects participating in the workstudy were matched for I.Q., achievement, and socioeconomic level with a comparison group consisting of students referred by their high school counselor who were not participating in the workstudy programs. A three year and five year follow-up study was conducted on both groups. The results indicated that there was no statistically significant difference between the employment rate of

of the two groups over a two year period. The results seemed to indicate that most of the educable mentally retarded would have been employed without the benefits of a workstudy program. Students who participated in the workstudy program, however, were graduated more often, held their jobs longer, and earned more money than did the students from the comparison group. Dinger (1973) followed 183 EMR students who had participated in a workstudy program, an academic special education program an external vocational program, and an internal vocational education program. He found that significantly more successfully employed graduates had been enrolled in the work study programs as opposed to the remaining three educational options.

Brolin, Durand, Kromer, and Muller (1974) conducted a follow-up study of 80 former educable retarded students who had participated in either a workstudy program or an academic special education program. The focus of this study was defined in terms of the percentage of time employed since high school, the number of hours worked per week, salary, and job satisfaction. Minimal criteria for achieving average or better than average vocational adjustment was set at the following: 75% or more of the time employed since high school, an average of 30 or more hours per week, a salary of $75 or more per week, and satisfaction with their present job. The results revealed considerable vocational adjustments problems for both groups. Overall those subjects who participated in a workstudy program attained a significantly higher degree of vocational adjustment than those in the academic group (29% versus 17% respectively). The majority of students in both groups who were employed indicated satisfaction with their current job. The study found that a large percentage of both groups (21% of the workstudy

group and 55% of the academic group) achieved poor vocational adjustment. Among the problems cited as contribution to subject's poor vocational adjustments were: unemployment, low pay, low job levels, not knowing how to find and apply for jobs, lack of experience, lack of appropiate skills, and lack of job openings.

Research by Boyce and Elzey (1978) also indicated that those students who received vocational training were more likely to have secured employment after graduation than those who did not receive such training. They also worked at a relatively higher occupational level, needed less on-the-job supervision, and were more likely to be more satisfied with their jobs then those without such training. In general these studies supported the notion that there was a relationship between the type of program participation and postschool success and adjustment.

Halpern (1978) assessed the impact of high school work experience programs on educable retarded young adults. The sample for the study consisted of former students from work-experience programs in 14 school districts from 10 counties in Oregon who graduated in 1968 and 1969. Of the 67 designated subjects in Sample 1 (1968 graduates) 49 (73%) were located and interviewed. Of the 79 designated subjects in Sample 2 (1969 graduates) 59 (75%) were located and interviewed. Each participant was interviewed within a year of leaving school. Halpern found that workstudy program completers were more successful in securing employment than were program dropouts.

The research of the 1960's and 1970's marked the beginning of interest into other handicapping conditions besides EMR such as the hearing impaired (Powers & Lewis, 1976). During this period researchers

began to collect data regarding the social integration of handicapped individuals into the community. Although the data gathered were limited and inconclusive, its importance as providing a base for future studies concerning the social experiences of the handicapped cannot be diminished. Aspects of social integration which were examined include: marital status (Gozali, 1972; Powers & Lewis, 1976); place of residence (Gozali, 1972; Powers & Lewis 1976); participation in community activities (Dearborn Study, 1970); job satisfaction (Boyce & Elzey, 1978; Brolin, Durand, Kromer & Muller, 1974); satisfaction with high school experiences (Brolin, Durand, Kromer & Muller, 1974; Powers & Lewis 1976); and possession of a driver's license (Powers & Lewis 1976). The focus of research also broadened to include the efficacy of various service models of delivery such as self-contained and mainstreamed vocational education programs (Dinger, 1973; Dinger, 1978; Halpern, 1978). The interest in program efficacy and service delivery models would be fostered in later years by the passage of legislation in the 1970's which provided the handicapped with open access to vocational education. It is to these post legislation years that our attention is now focused.

Research in the 1980's. Recently, the Colorado Department of Education (1982) conducted a follow-up study of 234 former special education students who completed educational programs between 1978 and 1979. The study provided data regarding the effectiveness of programming, the financial status of those interviewed, the role of significant others, sex differences, and predictors of vocational and social adjustment.

The study's results seemed to indicate that special education programs had been effective in preparing handicapped students for post school adjustment in the community. The majority of those respondents had a positive attitude about their lives. In regard to financial status the research indicated that although most of the graduates of the special education program were employed their earnings were at minimal levels. This finding suggested that more training was needed if these graduates were to be financially independent.

The role of significant other such as parents, teacher, and counselors exerted great influence in the preparation of respondents for their future roles in society. Such a finding suggested the need to enlist parental support in preparing students for long term vocational adjustments.

As in earlier studies (e.g., Dinger, 1976), the Colorado Study researchers found that special education was more effective in preparing male students for employment and independence than in preparing female students, yet female students received higher salaries. This follow-up study also identified the three most frequent predicators of vocational and social adjustment. These predictors included: a) high school experiences and the perceived usefulness of regular and special education programs, the type of special education program, and how well the program prepared them to find jobs as well as participate in social activities; b) sex (males experienced more frequent successes); and c) support received from parents and relatives (Mithaug & Horiuchi, 1983). Although most graduates were employed (69%), their earnings were at minimal levels (44% earned less than $3.50 per hour). Furthermore, 64% of the respondents indicated

that they lived at home with their parents which suggested a pattern of financial instability and family dependence. The strength of this study was that it attempted to collect data on a statewide basis. The researchers also gathered data on four handicapping conditions mental retardation, perceptual/communication disabilities, emotionally/behaviorally/behaviorally disturbed, and physical disability.

The 1980's also marked the advent of follow-up studies involving learning disabled students. These studies were limited in number and scope. Many were only concerned with basic skills, achievement, and emotional functioning rather than with employment (Horn, O'Donnell, & Vitulano, 1983). In reviewing 24 follow-up studies involving the learning disabled individuals, Horn, O'Donnell, and Vitulano (1983) also noted that the studies produced conflicting results. They attributed these conflicting and inconsistent results to the following methodological factors. First, some studies failed to provide adequate descriptions of the criteria used in defining a subject as learning disabled. Even among the studies which gave explicit criteria, the variation among criteria was considerable. For example, the discrepancy between reading scores and age-grade placement ranged from one year to three or four years. Such inconsistencies made it difficult to compare results across studies. Second, Horn et al. (1983) also suggested that careful descriptions of the demographic characteristics of learning disabled samples might be helpful in determining whether outcome was related to such factors as age, sex, and the socioeconomic status of learning disabled persons. Another methodological factor often overlooked by researchers was the inclusion of appropriate control groups. In absence of appropriate control

groups differing from a learning disabled group only in terms of the learning disability, one can never be certain whether an outcome was due to the disability or some alternative factor. A final methodological consideration cited was the age of the learning disabled sample at follow-up. Of the 20 follow-up studies which stated the age of subjects, 11 had samples who were between 10 and 18; eight had samples between the ages of 18 and 38 years at follow-up and only one followed the sample past the age of 28 years. Consequently, the majority of knowledge of long term outcome of learning disabled persons came from studies that included subjects who were not yet out of high school. Little data were available regarding the employment status and post school adjustment of learning disabled individuals. Only two recent studies (Buchanan & Wolfe, 1986; Hasazi, Gordon, & Roe, 1985) addressed the factors associated with the employment status of mildly handicapped youth. Hasazi, Gordon, and Roe (1985) sampled 462 students drawn from nine Vermont school districts chosen according to a stratified random sampling procedure. All students from nine school districts who had graduated, dropped (defined as students who exited school prior to age 18 without graduation) or left (defined as students who exited after age 18 without graduating) between 1979 and 1983 and who had received special education were identified. The definition of mildly handicapped in this study included learning disabled, emotionally disturbed, and educable mentally retarded youth. Of the sample (n=462), 301 former handicapped students and/or their parents/guardians were interviewed in person or by telephone. The figure, 301, represented a response rate of 65.5%.

The study indicated that over 50% of the sample (N=462) were employed and that most handicapped youth (48%) found their jobs though "self-family-friend networks". The results of an analysis of variance found that part-time or summer work during high school were significant predictors of the percentage of time employed since high school and current wages. Gender was significantly related to current employment status, with 66% of the males employed compared with 33% of the females. The program last attended in high school was significantly related to current employment status. Of those in resource programs, 62% were employed, compared with 36% of those in segregated special class programs. There was also a significant association between current employment status and vocational education. For those students who had vocational education, 61% were currently employed, compared with only 45% of those who had no vocational education.

An outgrowth of this cross categorical Vermont study was a statewide follow-up of the postschool employment of students labeled "mentally retarded" (Hasazi, Gordon, Roe, Hull, Finck, & Salembier, 1985). Of the 243 retarded youths who exited school between 1981 and 1983, 193 (79%) interviews were conducted. As in the earlier Vermont Follow-Up Study, the same questionnaire and procedures were used. Of the entire interviewed sample 46% were in paid jobs. Ninety-three percent were employed in nonsubsidized jobs although only 46% full-time. Of the employed, 61% found jobs on their own or with the help of family and friends. The remaining 39% of those employed were assisted by a variety of institutional services in securing employment. Gender was found to be significantly related to current employment status, with 56% of the males employed compared with 23% of females.

Disability classification in high school was significantly related to current employment status. Forty-seven percent of those labeled EMR were employed, compared with 14% of those labeled TMR.

In the area of school experiences the researchers reported interesting findings. There was a marginal association between current employment status and vocational education. Fifty-three percent of the students who had vocational education were employed compared with only 39% of those who had no vocational education. Of those students who had no summer jobs, only 27% were employed. Fifty-two percent of those who had subsidized jobs were employed while 71% of those who had nonsubsidized summer jobs were employed. Students who held part-time outside jobs during high school had a higher rate of employment (65%) than students who did not hold such jobs (38%).

In a follow-up study of 33 learning disabled adults, Buchanan and Wolfe (1986) found that 51% of the subjects were employed, 39% were currently enrolled as students in a variety of programs, and 9.1% were unemployed. When questioned about their public school experiences, 78.8% of the sample characterized their experiences negatively.

The follow-up studies conducted by Mithaug and Horiuchi (1983) and Hasazi, Gordon, and Roe (1985) represented the first attempts since Halpern's Oregon study (1978) to include a statewide sample of former students who had received special education services. They were also the most comprehensive studies to date following the legislative mandates of the 1970's which gave handicapped youth access to vocational education. The strengths of these studies included: the use of pilot tested interview questionnaires and use of a relatively

large stratified random sample. Edgar (1985) in reviewing the Vermont Follow-up Study suggested that the study was particularly informative because of the manner in which Hasazi, Gordon, and Roe (1985) collected data. The study gathered data which permitted comparison by handicapping condition, gender, geographic location, educational program characteristics, method of exit, and nonschool-related activities (after school/summer employment). These categories allowed for analyses of the interaction between student characteristics and the educational program. A number of postschool adjustment issues were not addressed in the Vermont Study. They included: place of residence, marital status, level of social activities, life satisfaction, and use of community resources. Only when these questions are addressed in future studies will the extent of postschool adjustment of special education students be fully understood. Studies which address social integration issues will be reviewed next.

Follow-Up Studies Examining the Postschool Social Adjustment of Handicapped Individuals

Studies investigating the social adjustment of handicapped individuals have also spanned the past five decades. Dimensions of social adjustment have included integration into the community, utilization of social agencies, patterns of social activities, friendship patterns, satisfaction with the quality of their lives, residential status, and marital status.

In comparing a group of 166 individuals categorized as "subnormal" by the Binet-Simon intelligence scale to a control group of normal individuals Fairbanks (1933 found that more of the subnormal group were married, divorced, and had more children than the control group.

Those labeled as "subnormal" exhibited more affiliations with social agencies than their normal counterparts. The follow-up studies of Kennedy (1948, 1960) and Baller, Charles, and Miller (1966) represent serious attempts to determine the precise characteristics of the social adjustment achieved by individuals identified during their school careers as retarded and living freely in the community in comparison with their normal peers. Kennedy (1948) studied 256 subjects whose I.Q. scores ranged from 45 to 75 during school age. To each of the 256 subjects desginated "retarded" she matched a control subject who started in the same first grade class. Controls were matched for age, sex, race, country of birth, nationality, and father's occupation. In general, the retarded and their normal counterparts showed similar patterns of marital life. They had married at approximately the same average age, had the same number of children, and showed similar tendencies in mate selection. The only significant differences were that the retarded families included step and adopted children and a higher divorce rate than the control subjects. In regard to anti-social behavior, the retarded cohort had a higher frequency of court records and a higher rate of recidivism. An analysis of the variables of social participation and leisure time activities indicated that retarded individuals demonstrated less frequent and extensive social participation than control group members. Individudals in both the retarded group and the control group had the same order of preference for various kinds of recreation including movies, sports, dancing, card games and gambling. Retarded individuals participated in these activities at a significantly lesser frequency than control subjects.

Kennedy (1960) attempted to replicate the analysis of 1948. She was able to relocate 69% of the retarded subjects and 79% of the controls of the original studies. Her findings indicated that 86% of the retarded *and* 92% of the controls had married. There was no significant difference in the divorce or separation rate of either group. Retarded individuals especially males showed a higher incidence of anti-social acts than did controls. In 1960, as in 1948, controls participated in organizations, read magazines, and voted more frequently than retarded subjects. Television was noted as being universally accepted as a leisure time activity of both groups. Kennedy concluded that the overwhelming majority of both groups made acceptable and remarkably similar adjustments in the personal, social, and economic domains. . She noted that the main differences exhibited between groups were of kind rather than degree.

Another extensive longitudinal investigation of non-institutional retarded populations was undertaken by Baller, Charles, and Miller (1966). These researchers collaborated in a study which updated the comparative life histories of Baller's 1935 mentally deficient or "low group", the dull or "middle group", and the comparison or "high group". Among the variables examined were marital status, anti-social behavior, and social and recreational activities. In regard to marital status, the mentally deficient or "low group" were more likely to live alone either because of never having been married or through the loss of a spouse in death or divorce. Low subjects had less success in getting, keeping, or replacing a spouse. The middle and high groups appeared to exhibit similar patterns of adjustment in regard to this variable. As in the original study (Baller, 1936), Baller et al. (1966) noted that

the mentally deficient group reported higher frequencies in breaching the law than the middle or dull group. The high or comparison group recorded no civil violations for the period 1951-62. The majority of individuals in all groups were consistently law abiding.

The results of the study regarding social and recreational activities suggested that participation in the social and civic life of a community was related to intelligence. The research findings appeared to suggest that the duller the individual, the less likely the individual was to belong to or participate in a social organization. Of the low group, more than one-half were members of a church and 40% belonged to some kind of club or society, but their degree of involvement was extremely low.

These findings were supported by Peterson and Smith (1960) who investigated the postschool social adjustment of 45 educable mentally retarded individuals and 45 individuals of a comparison group. Approximately 50% of both groups indicated a church affiliation although the comparison group attended church on a more frequent basis. Four times as many subjects in the comparison group were members of group organizations such as the PTA, card or dancing clubs, and fraternal orders. Individuals in the comparison group participated more actively in group activities such as visiting friends or relatives, picnicing, and attending movies than did their retarded counterparts. Among the civic characteristics noted in this study were that a greater number of individuals in the comparision group held drivers licenses than the retarded group, fewer retarded individuals registered to vote, and more individuals in the retarded cohort (62%) had committed legal infractions than did the comparison group (31%).

Stanfield (1973) interviewed the parents and guardians of 120 graduates of classes from the moderately (trainable) retarded in order to amass information to assess the quality of community life experienced by these individuals. The results of this study indicated that 94% of the subjects resided with their families. Of the total sample only 44% were involved in postschool work or habilitation programs. Sixty-two percent did not participate in any postschool leisure activities. The overall findings suggested a limited involvement of the retarded individual in community and neighborhood life.

Several studies conducted during the last decade have also focused upon the integration of adult mentally handicapped individuals within the community. In a study of 69 mentally retarded persons placed into independent housing, researchers Schalock, Harper and Carver (1981) analyzed quality of life variables including community utilization, leisure-time usage, and friendship patterns. The findings of personal interviews suggested that community utilization occurred frequently. Subjects used the community extensively, generally walking to the downtown shopping area about four times per week. The facilities visited, in descending frequency, included church, bowling alleys, restaurants, laundromats, grocery stores, banks, shops, or post offices. The average frequency of visitation per month for those faciliites was 6.6. Leisure time activities for typical work and nonwork days were reported. On workdays, the majority of nonwork activities involved watching T.V. and eating. On nonwork days, leisure time activities included napping, being away from the apartment, or

cleaning. In regard to friendship patterns, females reported having an average of two friends who were most likely to be a roommate, advocate, or former instructor. Each friend was seen on an average of five times per week, with activities including movies, shopping, eating out or attending church. Males averaged one friend whom they saw socially three times per week for activities including movies or athletic events. One third of the subjects interviewed reported having no friends.

In an earlier study, Richardson (1978) compared the interpersonal relationships of mentally retarded individuals with control individuals matched for sex, age, and social background. The results suggested that mentally retarded individuals have a more restricted set of interpersonal relations than do the comparisons. Mentally retarded adults were less often able than their comparisons to name as many as two friends. More mentally retarded males were single than were married or cohabitating. There were non significant differences noted between mentally retarded females and comparison females for the variables marital status and cohabitation.

In regard to residential status, several of the studies of retarded graduates indicated that the majority of these graduates continued to reside at home (Coonley, 1980; Gozali, 1972; Saenger, 1957). This finding was confirmed by a statewide follow-up study of 243 mentally retarded individiuals conducted by Hasazi, Gordon, Roe, Hull, Finck, and Salembier (1985). The results of this study indicated that 82% of these individuals resided in the parental home, with only 7% living in facilities operated by community mental health agencies and 11% living independently. A larger percentage of females (18%) than males (6%)

lived independently, presumably due to the higher proportion of married females (12% vs 2% of males). This was supported by the fact that only 7% of the single youths lived independently versus 64% of those who were married or separated.

One recent study, the Colorado Statewide Follow-up Survey (1985), addressed several aspects of the social integration of the handicapped including: postschool education/training, possession of a driver's license, use of public transportation, place of residence, social contacts and frequency, and general satisfaction with life. A total of 234 graduates from special education programs were interviewed three years after graduation. Of those interviewed, the largest portion had been enrolled in resource programs (46%) rather than self-contained (29%) or workstudy programs (25%). Half of the respondents (50%) reported that they had not taken any courses since graduation. Those who continued their education most often attended a community or junior college (18%), a state college or university (13%) or other (14%). Only 8% reported attending a vocational or technical school. Over 63% of those interviewed had not used the services of vocational rehabilitation. Fifty percent of those interviewed drove a car or motorcycle to work and other places. A significant portion (21%) used public transportation such as buses.

In regard to place of residence, 64% lived with their parents, 6% owned homes while 8% lived in apartments. Excluding contacts due to the subjects living arrangements (e.g., 64% lived with their parents), the most frequent social contacts were friends who visited less than once per week (24%), between two and four times per week (26%), and more than five times per week (31%). Eighteen percent reported no

visits at all from friends. This suggested that a relatively large proportion of the respondents were socially inactive (42%).

Answers to questions about the subject's views of life were generally positive. A majority (64%) indicated that they were satisfied or very satisfied with their life. Twenty-four percent reported that they felt "OK" or "neutral". Only 13% stated that they were dissatisfied or very dissatisfied with their life.

In general, the bulk of the follow-up studies which examined the postschool adjustment of handicapped individuals were conducted prior to the passage of legislation which provided greater educational opportunities and fostered greater integration of the handicapped population into society. Most of the studies focused upon the retarded population especially those in group home situations to the exclusion of other handicapping conditions. In light of the changes brought about by legislative mandates it seemed apparent that there was a need to undertake more follow-up studies which aimed at assessing the postschool social adjustment of handicapped individuals.

Summary

The review of literature suggested that the research examining the postschool vocational adjustment of handicapped students produced inconclusive results. Over the past 50 years, the majority of follow-up studies focused on educable (EMR) and trainable (TMR) students. Early studies comparing EMR and TMR students with non retarded control groups indicated little difference on employment dimensions (Fairbanks, 1933; Kennedy, 1948) or 30% less gainful employment for the retarded individual (Baller, 1936). Later follow-up studies of EMR and TMR subjects reported employment rates ranging from 77% to 92% (Bobroff,

1955; Carriker, 1957; Cassidy & Phelps, 1955) with most students employed in unskilled or semi-skilled occupations. More recently, studies of retarded graduates reported low economic and self-sufficiency with earnings below the poverty level (Coonley, 1980; Dinger, 1961; Gozali, 1972; Keim, 1979; Peterson & Smith 1960; Saenger 1957; Titus & Travis, 1975). Several studies indicated that the majority of the graduates lived at home (Coonley, 1980; Gozali, 1972; Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi & Fanning, 1985).

Results of studies on the relationship between the type of program and job success were mixed but they did suggest that there was a relationship between the two (Boyce & Elzey, 1978; Chaffin, Spellman, Regan & Davison, 1971; Collister, 1975; Dearborn Public Schools, 1970; Dinger, 1973; Halpern, 1978; Kernan, 1979). There also were inconclusive findings for studies which examined postschool adjustment and self-sufficiency as a function of sex (Dinger, 1961, 1973: Peterson & Smith, 1960). Two recent studies (Hasazi, Gordon & Roe, 1985; Hasazi, Gordon, Roe, Hull, Finck, & Salembier, 1985) found two variables to be significantly related to current employment status, gender and part-time or summer work during high school. In regard to job satisfaction, several studies found that most handicapped students indicated satisfaction with their current job (Boyce & Elzey, 1978; Brolin, Durand, Kromer & Muller, 1974).

Research in the area of postschool social integration and adjustment was extremely limited. Since most of the studies were conducted prior to the passage of U.S. Public Law 94-142 legislation and involved primarily the retarded it was difficult to develop a clear picture of

the current postschool adjustment status of the handicapped individual.

Previous research indicated that the handicapped participated less extensively and actively in social and leisure time activities than their *nonhandicapped* peers (Kennedy, 1948, 1960; Mithaug, Horiuchi, & Fanning, 1985; Peterson & Smith, 1960; Richardson, 1978; Schalock, Harper, & Carver, 1981; Stanfield 1973). Handicapped individuals displayed a higher incidence of anti-social acts when compared to a sample of the normal population (Baller, Charles, & Miller, 1966; Kennendy, 1948, 1960; Peterson, & Smith, 1960). Findings regarding the marital status of the handicapped varied. Some studies found similar patterns of marital life between the handicapped and control groups (Kennedy, 1948, 1960). Other studies suggested significant differences between the handicapped and nonhandicapped individudals in regard to marital status (Fairbanks, 1933; Baller, Charles, & Miller, 1966; Richardson, 1978) with more handicapped individuals being single or divorced than their normal counterparts.

In regard to mobility two studies (Mithaug, Horiuchi, & Fanning, 1985; Powers & Lewis 1978) indicated that the majority of handicapped individuals drove cars or motorcycles and/or used public transportation. Those studies reporting the students' living status indicated that most (64-94%) resided with their parents or guardians (Coonley, 1980; Gozali, 1972, Hasazi, Gordon, Roe, Hull, Finck, & Salembier, 1985; Mithaug, Horiuchi & Fanning, 1985; Saenger, 1957; Stanfield, 1973).

One recent study (Mithaug, Horiuchi, & Fanning, 1985) examined several key variables including postschool education and general

satisfaction with life. More than 50% of those interviewed reported that they had not taken any courses since graduation. Over 63% had not solicited the services of vocational rehabilitation. Of those surveyed, 64% reported that they were satisfied or very satisfied with their life.

The review of literature documented the lack of current vocational and social adjustment data regarding the handicapped. Consequently, there was a need to conduct methodological follow-up studies to address these two areas of concern if researchers were to assess the postschool adjustment of the handicapped individual on a more comprehensive level.

Although there was a significant amount of follow-up research regarding the status of special education graduates over the past five decades, several limitations in scope and focus of these studies prevented comprehensive analysis and description of the status of the graduates in general (Mithaug & Horiuchi, 1983). Three issues were clearly discernable. The first issue concerned the type of student contacted after graduation. The largest percent of the follow-up studies focused primarily upon the retarded population with most emphasis given to EMR students. Therefore, little information was amassed regarding the postschool status of students with other handicapping conditions. Of the few studies which involved other handicapping conditions such as learning disabilities, the majority were concerned with basic skills achievements and emotional/behavioral functioning of school age students rather than postschool adjustment and employment variables (Horn, O'Donnell, & Vitulano, 1983). Although there was a number of studies investigating the postschool adjustment

of handicapped youth, the majority were conducted in the 1960's and 1970's. This time frame was prior to the passage of legislation which gave many severely and moderately handicapped students access to school-based programs and the expansion and refinement of secondary and vocational education programs to accommodate handicapped learners (Hasazi, Gordon, & Roe, 1985).

A second major difficulty with past studies was sampling. Typically, these studies included graduates of only a few high schools or cities with a state. Only four (Cassidy & Phelps, 1955; Halpern, 1973; Mithaug & Horiuchi, 1983; and Hasazi, Gordon & Roe, 1985) attempted to reflect the employment status of graduates throughout a state. This was an important issue because of known differences between districts in urban, suburban, and rural communities within a state. Consequently, the findings of many studies might be deceptive in that differences intrinsic to the educational programming and employment opportunities alone might influence postschool adjustment and success.

The third problem concerned the type of information collected. Although most studies solicited information on a graduate's employment status there was variation in the types of additional information collected. Some studies gathered data on the nature of the student's program and attempted to relate the data to employment outcomes. Others focused on postschool community and work adjustment variables. Mithaug and Horiuchi (1983) stated that it was imperative that both sets of data be collected in order to develop a detailed analysis of the correlation between school programs and a variety of postschool adjustment dimensions. In addition, they suggested that it might be

useful to solicit information on the graduates' opinions regarding their school experiences including what were the most and least useful experiences in preparing them for the future.

In conclusion, the review of literature made it apparent that the weaknesses of the past follow-up studies were not so much in what they did or how they did it but in their scope and in the kinds of information which they omitted. Previous studies had not comprehensively or systematically collected the type of information needed to develop a detailed analysis of the employment outcome and postschool adjustment of handicapped respondents. Review of the literature suggested that what was needed was a comprehensive and systematic follow-up study which combined the positive aspects of earlier follow-up studies and gathered data regarding the education and employment history of handicapped respondents as well as information regarding the postschool adjustment of these respondents.

This study addressed two of the three methodological issues previously identified, namely, the type of student contacted and the type of information collected. In regard to the type of student contacted for follow-up, the majority of earlier studies focused upon mentally retarded individuals. The passage of PL 94-142 enabled all handicapped children to become eligible to receive special education services including the emotionally impaired, hearing impaired, visually impaired, learning disabled, and physically handicapped as well as the mentally retarded. The present study addressed this issue by surveying mildly handicapped individuals. Consequently, a broader range and and cross section of handicapping conditions were included in this study.

In regard to the type of information collected, earlier reserarch focused upon either the employment outcome or the social adjustment of handicapped individuals once they graduated or left high school. Few studies collected both employment outcome and social adjustment data. The present study examined both types of data.

The study attempted to fill the documented void by soliciting information through personal interview with handicapped respondents regarding their current employment status; income; employment and training history; satisfaction with their school program, training, and job; and their use of community and social services. Demographic variables such as sex, marital status, and parental employment were also examined. Postschool social adjustment variables including the types and frequency of leisure time activities, patterns of friendships and social interactions, marital status, place of residentce, possession of a driver's license, satisfaction with life, and postsecondary education and training were investigated. Data collected on these variables may enable the researcher to provide a more complete description of the postschool vocational and social adjustment of handicapped individuals.

An additional concern of the researcher was the development of a reliable instrument to collect employment outcome and postschool social adjustment data. Although earlier studies used survey instruments the reliability coefficents and validity of these instruments were not reported. The development of the instrument used in this study and its reliability are discussed in the following chapter. Details of the methodological plan for this study will be presented next in Chapter 3.

CHAPTER 3

Method

This two year follow-up study was designed to determine the current employment status and postschool social adjustment of former handicapped high school students who were in the 12th grade in the 1983-84 academic year. Students from this academic year were divided into two groups according to the type of program in which they were enrolled and the level of special education services which they received. Personal interviews were conducted with randomly selected handicapped individuals from each group to solicit current employment status, present income, employment and training history, satisfaction with their job and high school programs, and their use of community and social services in securing employment. Demographic variables such as sex, race, parental employment and status skill level, and manner of exit from school were also be investigated. Data solicited from these personal interviews were used to describe the employment outcome of handicapped individuals. The study also collected data regarding the postschool social adjustment and integration of handicapped individuals within the community. This data included marital status, place of residence, the type of social activities in which they engaged, friendship patterns, and their satisfaction with their social life. The study also described the postschool social experiences and activities of these handicapped individuals.

Subjects

The population considered for this study was all handicapped

students in Level I - IV as defined by the Education for All Handicapped Children Act of 1975 (U.S. Public Law 94-142), and the Maryland State Plan, who were members of a 12th grade high school class in a Washington metropolitan area school system during the 1983-84 year. The Washington metropolitan school system used in this study had 19 comprehensive high schools.

The total student enrollment of the county school system for the 1983-1984 academic year was approximately 105,050. The racial composition of the student body were 57% black, 39% caucasian, and 4% students of various other origins. As of March 1, 1984, 12,435 (11.8%) of these students received special education services. There were 8,541 students serviced in resource programs (Levels I - III) and 1,718 students serviced in self-contained (Level IV) programs in grades one through 12. At the high school level, there were 1,793 students serviced in Level I through III, programs and 726 students serviced in level IV, self-contained programs. One hundred seventy-five level I through III resource students were in the 12th grade in the 1983-84 academic year. In the same year 205 Level IV, self-contained students were in the 12th grade.

Sample selection for 1983-84 students. A sampling frame of 1983-84 students was generated using the 12th grade class lists of the names and addresses of levels I through III resource students and level IV, self-contained students, provided by the County Special Education Placement Office.

Selection of a random sample. Once the groups had been identified, 25% of the individuals in each group were randomly selected using a table

of random numbers. Prospective subjects were randomly selected from a master list of the names and addresses of handicapped students by the County Special Education Placement Office. Each group was oversampled by 10% to insure that at least 25% of the population were members of the sample. For group one, the students in special vocational education program, 70 students of the total 12th grade population of 205 were randomly selected to be interviewed. For group two, the students in a mainstreamed resource program, 60 students of the total 12th grade population of 175 were randomly selected to be interviewed.

Instrumentation

Personal interview/telephone survey of 12th grade students of special services and vocational programs. The instrument which was used in this study to interview former handicapped high school students was adapted from the Vermont Follow-up structured survey instrument developed by Hasazi, et al. (1983; 1985). The stuctured interview was designed to solicit information from students on their current occupation, employment history, postsecondary education and vocational training experiences, social service utilization, and current marital and residential status. Items were selected for inclusion in this study according to their relevancy to information pertinent to the variables in question. A copy of the instrument can be found in Appendix H. Items were adjusted as needed to reflect the educational options afforded county students and to conform with the Bureau of Labor Statistics definitions of employment, unemployment and not in the labor force.

Items regarding postschool social adjustment were developed by the researcher based on previous studies. Salient variables were selected from the review of literature. These variables include: friendship patterns (Mithaug, Horiuchi, Fanning, 1985; Richardson, 1978; Schalock, Harper & Carver, 1981); leisure time activities (Baller, Charles & Miller, 1966; Kennedy, 1948, 1966; Peterson & Smith, 1960; Schalock, Harper, & Carver, 1981; Stanfield, 1973); job satisfaction (Boyce & Elzey, 1978; Brolin, Durrand, Kromer, & Miller, 1974); satisfaction with life (Mithaug & Horiuchi, 1983); possession of a driver's license (Mithaug, Horiuchi, & Fanning, 1985; Powers, 1976) and postsecondary training and education (Hazasi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985; Stanfield, 1973).

The original personal interview questionnaire was reviewed for clarity and content by a panel of experts consisting of special education teachers, vocational education teachers, and faculty from higher education institutions. Appropriate revisions were made according to the recommendations of this panel. The revised questionnaire was pilot tested with five high school students to determine areas of possible difficulties before formally commencing the interviews. Revisions were be made when necessary.

Interrater reliability. Data were collected by three interviewers, the research and two experienced special education teachers. Interrater reliability was calculated between the researcher who served as the standard and each of the other interviewers. A reliability coeffiecent of .80 was required before any data was collected. Interrater reliability was calculated using the percentage agreement

method (Tawney & Gast, 1985). The realibility coeffient was computed as follows:

$$\frac{\text{Agreements}}{\text{Agreements \& Disagreements}} \times 100 = \text{Percent of Agreement}$$

Estimates of reliablity were obtained throughout the data collection. These reliability checks were evenly distributed throughout data collection.

Procedure

The procedure was divided into three phases: (1) selection and training the interviewer, (2) locating the individuals selected for study, and (3) conducting the interview. Before phase one was undertaken, letters of introduction containing the endorsement of the school system and explaining the intent of the research were sent to all vocational and special education teachers to establish rapport and solicit their services if needed to locate students for the study whose addresses may have changed since graduation. Once this initial step was completed interviewers were selected and trained.

Training the interviewers. This study required the services of two interviewers, in addition to the researcher, with a background in special education because the population to be investigated was handicapped. Although conducting follow-up research with special populations such as the handicapped does not differ significantly in the procedures for its administration with other groups, studies focusing on special populations require personnel who are knowledgeable about special populations (Franchak & Spirer, 1979). The personnel must be cognizant of the unique needs of the special population which result from their handicapping condition, knowledgeable of the problems peculiar to their

particular needs, and sensitive in regard to initiating and maintaining interpersonal relationships with others.

Prior to the collection of information, the two interviewers were trained during two two hour sessions. Interviewers were told that the purpose of the study was to "collect demographic, employment and social outcome data on handicapped individuals who were enrolled in workstudy or resource programs in 1983-84 academic year". Training included a review of the purpose of the study, interview techniques, and an item-by-item interpretation and discussion of the interview questionnaire, and search procedures for locating former students. Each interviewer was observed during two practice interviews by the researcher to ensure accuracy in recording and coding responses. Their effectiveness in conducting interviews was also be assessed. The researcher coded interview data as the interviewer was conducting the interview. Agreement between the interviewers was assessed by computing a reliability coefficient using the percentage agreement method (Tawney & Gast, 1985). Interrater reliability was calculated with each interviewer using the researcher as the standard. The reliablility coefficient was computed as follows:

$$\frac{\text{Agreements}}{\text{Agreements + Disagreements}} \times 100 = \text{Percent of Agreement}$$

Practice interview sessions were continued until a .80 reliability coefficient was attained. Interrater reliability figures ranged from .87 to .92 throughout training sessions.

On 10 percent of the field visits distributed throughout the data collection phase, the researcher accompanied the interviewer to collect reliability data. The researcher collected data on the interview

schedule/questionnaire while the interviewer was conducting the interview. A reliability coefficient was calculated using the interval agreement method (Tawney & Gast, 1985) to ensure that a .80 reliability between interviewers was maintained. Disagreements were discussed and resolved. Since the researcher was used as the standard his data was coded whenever there was a disagreement. Reliablity coefficents on field visits ranged from .91 to .95.

Locating participants. Upon completion of training each interviewer were given the names, addresses, and telephone numbers of the randomly selected handicapped students who graduated from high school in 1983-84. The list was divided into two groups according to the program in which the students were enrolled. Interviewers were responsible for sending a form letter of introduction developed by the researcher to each prospective subject explaining the intent of the research, assuring the confidentiality of results, and soliciting his/her voluntary participation. The interviewers then contacted each randomly selected subject by telephone to set up a personal interview appointment. Personal interviews were conducted whenever possible because this method provided the researcher with the opportunity to probe and restate items to insure clarity and comprehension. It alleviated possible problems of comprehension by minimizing the reading on the part of the subject. It also provided the subject with a mode for responding to the questions which did involve writing.

When trying to locate individuals whose telephone numbers were not operational and/or whose addresses had changed, interviewers were directed to use the following measures. Interviewers were instructed

to contact directory assistance when trying to obtain a working phone numer for a perspective respondent. When attempting to secure the current address of perspective respondents interviewers were directed to visit their high school soliciting information from guidance counselors, teachers, and students. Interviewers were also instructed to visit the last known address of the perspective respondent as well as neighborhood churches and recreation centers to ascertain the current address of selected individuals.

Conducting the interviews. The interviewer was also responsible for selecting a neutral setting in which to conduct the personal interview. Experts on follow-up studies of handicapped populations (Franchak & Spirer, 1979) suggest that using familiar settings such as the subject's former school, place of work, or home may contaminate the subject's responses to interview questions. This contamination may occur when family or friends of the subject are present during an interview. These significant others may interrupt the interview or interject their interpretation of what the subject really means. Their presence alone, however, may contaminate the results in that the subject may be reticent or reluctant to answer questions honestly. The subject's self-image in relation to his/her family or friends and the subject's perception of how his/her answers will be interpreted may influence his/her performance.

When personal interviews were not feasible due to scheduling problems or time constraints, telephone interviews were conducted. The interviewer introduced himself as a person collecting information on behalf of the school system. The interviewer also assured that the telephone interview would be conducted in a neutral setting by

scheduling appointments for telephone interviews at recreation centers, public libraries, or some other neutral setting at a specified time. All data were recorded on the interview schedule/questionnaire by the the interviewer.

Data analysis and Interpretation

Due to the descriptive nature of this study, the data collected by the interviewers were coded and presented in the form of frequency distributions and the percentage of respondents who selected each alternative for each item. The employment rates of each of the two groups were compared to the national statistics for normal individuals in the same age group (1985) and to state and the local county statistics for the same age group.

To the extent possible, data from the present study were compared with other research that used samples similar to the present sample in regard to the range of disabilities present and the number of years since exiting high school. The studies most appropriate for direct comparison were the Colorado State Follow-up Study (Mithaug, Horiuchi,& Fanning, 1985) and the Vermont Follow-up Study (Hasazi, Gordon, & Roe, 1985) due to the generic cross-sectional nature of the population and the time frame for the follow-up of students which were similar to the mildly handicapped population and time frame of the present study. To a lesser extent, there were other studies which were helpful in providing comparisions. Studies examining mildly handicapped students such as EMR, hearing impaired, physically handicapped, or the learning disabled students who could possibly be members of this study's population were also used for comparison. In the event that the sample or

the time frame for follow-up (number of years since exiting high school) was discrepant from the current sample, comparisons were made cautiously and differences were noted.

The vocational adjustment variables were compared to previous research studies examining the same variables. General employment data were compared to the Colorado State Follow-up Study (Mithaug, Horiuchi, & Fanning, 1985) and the Vermont Follow-up Study (Hasazi, Gordon, & Roe, 1985a). Employment status was also compared by program participation, either workstudy or resource. The employment data of students in the workstudy program were analyzed in relation to the findings of earlier studies (Brolin, Durand, Kromer, & Muller, 1974; Carriker, 1957; Cassidy & Phelps, 1955; Chaffin, Spellman, Regan, & Davison, 1971; Dinger, 1973; Gozali, 1972; Hasazi, Gordon, & Roe, 1985a; Keim, 1979). High school training and related work experience variables were compared to the results of the Vermont Follow-up Study (Hasazi, Gordon, & Roe, 1985a). Comparisons for the variables of job satisfaction and program satisfaction were limited to the 1974 study by Brolin, Durand, Kromer, and Muller. It was the intention of this study to address the recommendations of experts (Edgar, 1985; Phelp, 1982) by providing much needed data on this variable. The findings related to networking to locate a job were compared with the results of the Vermont Study (Hasazi, Gordon, & Roe, 1985) and its substudy conducted by Hasazi, Gordon, Roe, Hull, Finck, & Salembier (1985).

Social experience and integration variables were analyzed in comparison with the results of pertinent research. Findings regarding marital status were compared with those of previous research studies

(Baller, Charles & Miller, 1966; Gozali, 1972; Kennedy, 1948, 1960; Hasazi, Gordon, Roe, Hull, Finck, Salembier, 1985). This study also provided marital status data needed to fill the void documented in the post PL 94-142 legislation literature (Edgar, 1985). Residential status was examined in comparison with the results of earlier research with similar samples (Coonley, 1980; Gozali, 1972; Hasazi, Gordon, Roe, Finck & Salembier, 1985; Mithaug, Horiuchi, & Fanning, 1985; Saenger, 1957; Stanfield, 1973). Previous research in the area of social and leisure time activities (Kennedy, 1948, 1960; Mithaug, Horiuchi, & Fanning, 1985; Peterson & Smith, 1960; Richardson, 1978; Schalock, Harper, & Carver, 1981; Stanfield, 1973) provided the basis for the comparison of the results of this study. The mobility variable (i.e., possession of a driver's license) was compared with the findings of Mithaug, Fanning, and Horiuchi, (1985) and Powers and Lewis (1976). Data on the general satisfaction with life and postschool education/training of students furnished current baseline data since these results could only be compared to those of the Colorado Study (Mithaug, Horiuchi, & Fanning 1985).

CHAPTER 4

Results

This study was designed to describe the current employment status and postschool social adjustment of former handicapped high school students. Personal and/or telephone interviews were conducted to solicit information regarding the current employment status, present income, employment and training history, satisfaction with their job, and use of community and social services in securing employment. The study described demographic variables including sex, race, manner of exit from school, and parental employment. Data were also gathered to describe the postschool social experiences, activities, and integration of these handicapped individuals into the community.

Chapter 4 presents a descriptive analysis of the data based upon the conceptual framework and research methodology detailed in Chapter 3. Results will be discussed using the framework of the five research questions posed in Chapter 1. Each of the two groups studied, students enrolled in level I-III and students enrolled in level IV special education programs, will be discussed separately. Consideration will also be given to previously reviewed relevant literature as it relates to the findings.

Data from the present study were compared with other research using similar samples in regard to the range of disabilities and the number of years since the student exited school. The studies most appropriate for direct comparison are the Colorado State Follow-Up Study (Mithaug, Horiuchi, & Fanning, 1985) and the Vermont Follow-Up Study

(Hasazi, Gordon & Roe, 1985) which are similar to this study in demographics, in the cross sectional nature of the sample, and the time frame for the follow-up. To a lesser extent studies examining a variety of mildly handicapped students such as EMR, hearing impaired, or learning disabled students, who could possibly be members of this study's population will also be used for comparison. In regard to general demographic and employment data, comparisons will be made, whenever possible, to national, state, and local demographic statistics for normal individuals of the same age group.

It should be noted that the demographic information for this study (e.g., sex and race) may be different than that of the general population. These differences may be related to demographic differences between the two groups and not necessarily due to a difference in the variable under consideration.

Level IV Results

Response Rate

Of the 70 level IV individuals randomly selected to be interviewed, 65 (92.8%) interviews were completed. Of the 5 (7.2%) interviews which were not completed, 3 (4.3%) individuals could not be located after an extensive search and 2 (2.9%) declined to participate. Fifty-six (86.2%) participants were interviewed in person while the remaining 9 (13.8%) were interviewed by telephone. Table 1 depicts the findings.

Table 1

Response Rate for Level IV Respondents

Variable	f (%)
Interviews	
Attempted	70
Completed	65 (92.8)
Not Interviewed	5 (7.2)
Deceased	0 (0.0)
Declined	2 (2.9)
Unable to locate	3 (4.3)
Type	
Personal	56 (86.2)
Telephone	9 (13.8)

Question 1: Demographics

In each interview basic demographic information was solicited from each of the former level IV students. These demographic variables included: (a) sex, (b) race, (c) manner of exit from school, and (d) parental employment and skill level. Table 2 provides a summary of the demographic data for level IV respondents.

Table 2

Demographic Data for Level IV Respondents

Variable	f (%)
Sex	
Female	21 (32.3)
Male	44 (67.7)
Race	
Black	40 (61.5)
Caucasian	25 (38.5)
Other	0 (0.0)
Manner of exit from school	
Graduated	62 (95.4)
Dropped out (under 18)	2 (3.1)
Left (18 and over)	1 (1.5)

Sex. The sample consisted of 44 (67.7%) males and 21 (32.3%) females. This sex distribution was nearly identical to that of the Colorado and Vermont surveys. The Colorado State Follow-Up Study's (1985) sex distribution was 65% males and 35% females while the Vermont Follow-Up Study reported a sex distribution of 63.2% male and 36.8% female. As in both earlier studies, men outnumbered women by a ratio of nearly 2 to 1.

Race. The racial breakdown of the cohort included 25 caucasians (38.5%), 16 males and 9 females, and 40 blacks (61.5%) of which 28 were males and 12 were females. This racial composite appeared to reflect that of the student body of the county which was composed of 57% black and 39% caucasian students.

Manner of exit from school. Of the sample interviewed 62 (95.4%) graduated from high school receiving a diploma, two (3.1%) dropped out of high school without graduating before the age of 18 while one (1.5%) left high school after age 18 without graduating. These figures are similar to those of the Colorado Study (1985) which reported that nearly all the students in its sample attended the 12th grade (98%) and received a high school diploma (94%). These figures represent a higher graduation rate than reported in the Vermont Follow-Up Study (1985). In that study 66% of the sample graduated, 23% dropped out before age 18 while 11% left school after their 18th birthday. These discrepancies in graduation statistics must be viewed cautiously as graduation requirements vary from state to state.

Parental Occupation. In regard to parental occupation information was solicited from students regarding the employment status of their

father and/or mother if appropriate (see Table 3). Forty-three (66.2%) reported that their father was employed, three (4.6%) indicated that their father was retired, seven (10.8%) that he was deceased, and 11 (16.9%) noted that the item did not apply to their situation. Focusing on the father's who were employed, 18.6% were engaged in semi-skilled positions. Approximately, 39.5% performed skilled labor while 41.9% worked in an unskilled capacity as show in Table 3.

Table 3

Occupational and Skill Level of Parents of Level IV Respondents

Variable	f (%)	f(%)
Occupation	father (n=65)	mother (n=65)
Not applicable	11 (16.9)	1 (1.5)
Semi-skilled	8 (12.3)	11 (16.9)
Skilled	17 (26.2)	8 (12.3)
Unskilled	18 (27.7)	16 (24.6)
Unemployed	0 (0.0)	1 (1.5)
Not in labor force	0 (0.0)	0 (0.0)
Disabled	0 (0.0)	0 (0.0)
Retired	3 (4.6)	1 (1.5)
Deceased	7 (10.8)	4 (6.2)
Homemaker	0 (0.0)	20 (30.8)
Missing data	1 (1.5)	3 (4.6)
Skill Level	father (n=43)	mother (n=35)
Semi-skilled	8 (18.6%)	11 (31.4%)
Skilled	17 (39.5%)	8 (22.9%)
Unskilled	18 (41.9%)	16 (45.7%)

Participants data concerning mother's occupation revealed that 35 (53.8%) were employed (see Table 3). Twenty (30.8%) reported that their mothers were homemakers. Four (6.2%) indicated that their mother was

disabled while three (4.6%) reported her as deceased. In terms of skill level of employment over 31.4% were engaged in semi-skilled jobs, 22.9% performed skilled labor, and approximately 45.7% worked in an unskilled capacity as shown in Table 3. At the present time there are no recent follow-up studies which reported parental occupation statistics thus making comparisons impossible at the present time. This study may provide baseline data in regard to this variable.

Summary. The following list of findings describes the significant demographic characteristics of the sample of respondents of this study. Men outnumbered the women by a ratio of nearly 2 to 1. The majority (61%) of respondents were black. Nearly all those surveyed graduated from high school receiving a regular diploma. In regard to parental employment over half the parents were presently employed. The majority of fathers worked in semi-skilled or unskilled positions as was the case with the mothers. Approximately one-third of the mothers were homemakers thus eliminating them from the labor force.

Question 2: Employment Outcome

Data concerning the employment outcome of level IV respondents were collected during each personal/telephone interview. The variables included: (a) current employment status, (b) wages, (c) type of employment, (d) positive employment outcome, (e) manner of finding employment, and (f) use of community and service agencies in seeking employment. Table 4 presents the postschool employment data for level IV respondents

Employment status. Within the sample of former level IV students, 51 (78.5%) were currently employed while 14 (21.5%) reported that they were not working. Of the 14 who indicated that they were not employed,

6 (9.2%) described themselves as students, homemakers, or disabled and consequently characterized as "not in the labor force" due to their status. The remaining 8 (12.3%) were classified an "unemployed" as defined by the Bureau of Labor Statistics.

Focusing on the employed, the majority (80.4%) were engaged in full time positions (35 hours or more per week). Forty-eight (94.1%) worked at jobs labeled permanent while the remaining 3 (5.9%) were engaged in temporary positions. All jobs were described as unsubsidized by either the government or an agency. A comparison of employment status by gender as presented in Table 5 indicated that 90.9% of the males and 52.4% of the females were employed. When analyzed in terms of job skill level across gender, 60.8% were employed in unskilled capacities, 31.4% in semi-skilled capacities, and 7.8% in skilled positions.

Table 4

Postschool Employment Data for Level IV Respondents

Variable	f (%)
Current Employment Status	
Employed	51 (78.5)
Not Employed	14 (21.5)
Not in labor force	6 (9.2)
Unemployed	8 (12.3)
Employment	
Hours/week	
Full time (>35 hrs)	41 (80.4)
Part-time (1≤ 34 hrs)	10 (19.6)
Skill Level	
Semi-skilled	16 (31.4)
Skilled	4 (7.8)
Unskilled	31 (60.8)

Table 4 (continued)

Postschool Employment Data for Level IV Respondents

Variable	f (%)
Length of Employment	
> 1 mo. < 6 mos.	4 (7.8)
> 6 mos.< 1 yr.	16 (31.4)
≥ 1 yr. ≤3 yrs.	31 (60.8)
Wages/Hour	
<$3.35	0 (0)
$ 3.35 (minimum wage)	7 (13.7)
$ 3.36 - 5.00	33 (64.7)
≥ $ 5.01	11 (21.6)

Table 5

Employment Status by Gender of Level IV Respondents

Variable	f (%)
Female (n =21)	
Employed	11 (52.4)
Not Employed	10 (47.6)
Male (n =44)	
Employed	40 (90.9)
Not Employed	4 (9.1)

The employment rate of 78.5% appears consistent with the findings of earlier studies. In a four year follow-up of EMR students, Cassidy and Phelps (1955) reported a higher employment rate (87%) while other studies involving EMR students noted percentages of employment similar to the current study (Carriker [1957] 86%; Dinger [1958] 81%). In a six year follow-up study Keim (1979) reported an employment rate of 77% for mildly retarded individuals who participated in workstudy programs.

The employment statistics of the present study compared favorably with those of the Colorado and Vermont Follow-Up Studies. Both reported employment rates between 65% (Vermont Follow-Up Study, 1985) and 69% (Colorado Follow-Up Study 1985). Both also reported much lower percentages of those employed on a full time basis (33%, Colorado Follow-Up Study; 67%, Vermont Follow-Up Study) than the present study (80.4%). Virtually all (99%) of the respondents of the Vermont Follow-Up Study were in nonsubsidized jobs as was the case in this study. The findings regarding employment by gender 90.9% of males employed compared with 52.4% of the females supported those of the Vermont Follow-Up Study (1985) which reported that gender was significantly related to the current employment status (66% of males employed compared with 33% of females).

Earlier research including the Vermont Follow-Up Study (1985) provided employment data which reported only the percentages of respondents who were employed. The present study attempted to ascertain the percentage of respondents who were unemployed. The study used the Bureau of Labor Statistics' definition of unemployment. According to that definition unemployed persons comprise all subjects who during the reference period had no employment but made specific efforts to find a job during the prior 4 weeks or were waiting to be recalled for a job from which they had been laid off or waiting to report to a new job within 30 days (Statistical Abstract of the United States, 1985). Using a similar definition, the Colorado Study (1985) reported that 19% of the respondents interviewed were unemployed and looking for work. The present study found a lower unemployment rate of 12.3%.

Comparing the unemployment statistics of level IV respondents to their normal peers on a national, state, and local level revealed several differences. National statistics (U.S. Department of Labor Statistics, 1985) indicated that 13% of those individuals between the ages of 18 and 24 were unemployed. On the state level, the unemployment figure for the same age group was slightly higher at 14.6% (Maryland Department of Employment and Training, 1985). Locally, the county unemployment rate was 6.7% for individuals between the ages of 20 and 24 years (Maryland, Department of Employment and Training, 1980).

The figure of 12.3% unemployed reported in this study was less than that reported by national and state governments but higher than that reported in the county. Caution must be exercised in drawing conclusions from such comparisons. It is important to note that the national and state figures available were those for the 1985 fiscal year. Unemployment rates may have decreased appreciably. Unemployment statistics for the county were those reported on the 1980 Census. Since the current county unemployment rate for adults 16 years and older was 3.1% it appears likely that the figure for persons between 20-24 years of age may have also decreased.

Overall, the level IV respondents appeared to have employment rates comparable to those of their normal cohorts on both a national and state level. Within the county in which they reside they did not appear to do as well as their normal peers in terms of employment.

Wages. Another variable explored concerned the wages that respondents earned. Of those employed 13.7% earned minimum wage, 64.7% indicated that they earned between $3.36 and $5.00 per hour, while 21.6%

stated that they earned over $5.01 per hours (See Table 4).

These figures are higher with those of the workstudy students surveyed by Hasazi et al. (1985). Her data indicated that of those students who participated in a workstudy experience, 8.0% earned less than $3.35 per hour (minimum wage), 20.0% earned minimum wage, 56% earned between $3.35 and $5.00 while 16% earned more than $5.00 per hour.

Examining hourly wages in terms of sex produced the following results. Of the level IV males 12.5%, earned minimum wage while 62.5% reported earning between $3.37-$5.00 per hour. Twenty-five percent indicated that they earned more than $5.00 per hour. The percentage for the females vary somewhat from those of the males with 18.2% earning minimum wage and 72.2% earning between $3.36-$5.00 per hour. Only 9.1% of the females indicated that they earned over $5.00 per hour. The results seem to suggest that there are disparities in wages earned between male and female respondents. Male respondents appear more likely to earn more money per hour than females (87.5% of the males earned more thant $3.36 per hour compared to 81.8% of the females). These findings are interesting in light of a recent report released by the Census Bureau. In a study entitled, "Women in the American Economy" the Census Bureau reported that there is a disparity in salaries between males and females with females earning 65% of what males earn and continuing to work in low-paying occupations (Anderson, 1987). The findings of the present study suggest that this disparity may also exist within the handicapped population as well.

Job classification. Using the Dictionary of Occupational Titles

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(U.S. Employment Service, 1965) classification of the current employment of those individuals surveyed was conducted (see Table 6).

Table 6

Dictionary of Occupational Titles (DOT)

Classification of Current Jobs of Level IV Respondents

Occupational Title (n=51)[a]	f (%)
Professional/Managerial	7 (14.3)
Clerical/Sales	11 (22.4)
Service	11 (22.4)
Agriculture, Forestry	3 (6.1)
Processing Occupations	1 (2.0)
Machines and trades	2 (4.1)
Benchwork	0 (0.0)
Structural Occupations	9 (18.4)
Miscellaneous	5 (10.2)

[a] Frequency in category may not sum to overall n due to missing data.

The highest percentages of individuals employed were in clerical and sales postions (22.4%) and in service occupations (22.4%). Processing occupations, machines and trades, and agricultural positions comprised only 14.2%. Only 14.3% of those employed were engaged in professional or technical occupations.

Although comparisons to the Vermont Study (1985) must be done cautiously due to the differences in the economic demographics of each state, a similar trend persists. As in this study, the highest percentages of those surveyed from a metropolitan area in Vermont were engaged in clerical or sales occupations (42.9%) while the lowest percentage (2.9%) were employed in professional or managerial positions. The present study found that a larger percentage (14.3%) of respondents

were engaged in managerial/professional positions.

Positive employment outcome. For the purpose of this study, a positive employment outcome was defined as the engagement of an individual in work whether subsidized or unsubsidized for minimum wage or better either in a full time or part-time capacity for a duration of at least six months or longer. The data indicated that 78.5% of those surveyed were employed in a full time or part-time capacity. All of those employed (100%) were engaged in nonsubsized employment. These students all earned minimum wage ($3.35/hour) or better: 13.7% earned $3.35 per hour, 64.7% earned between $3.36 and $5.00 per hour, and 21.6% earned more than $5.00 per hour. In terms of the length of employment, 7.8% worked for one to five months; 31.4% worked between six months and one year at the same job while 60.8% had been employed between one and three years. Using the definition above, 92.2% of those employed at the time of the interview experienced a positive employment outcome.

Regarding skill level of their occupation, semi-skilled, skilled, and unskilled, 31.4% of the students worked in semi-skilled jobs, 7.8% in skilled employment while the majority, 60.8%, were engaged in unskilled employment. These figures are similar to the findings of Peterson's (1959) follow-up study of EMR students. Of those Peterson interviewed 65% worked in unskilled positions. Earlier research like Carriker's (1957) indicated that the bulk of those employed were engaged in unskilled labor (75%) with only 4.1% working in skilled occupations. Dinger (1958) reported that the largest portion of those employed were working in semi-skilled (32%) and unskilled occupations (35%). Other studies by Cassidy and Phelps (1955) and Kennedy (1962) corroborated

these findings. The data from this study appeared to confirm the findings of these earlier studies conducted approximately 25-30 years ago that most students performed unskilled or semi-skilled labor.

Manner of finding employment. Individuals were asked how they found work. Respondents could list more than one source when answering the question. Table 7 depicts the responses of participants in regard to the persons and agencies helpful in finding employment.

Table 7

Persons and Agencies Helpful in Finding Jobs for Level IV Respondents

Variable	f (%)
Person	
Self	35 (53.8)
Parent/Relative	18 (27.7)
Teacher	20 (30.8)
Counselor	2 (3.1)
Friend	9 (13.8)
Vocational Counselor	0 (0.0)
State Employment Counselor	0 (0.0)
Other	3 (4.6)
Agency Contacted	
Vocational Rehabilitation	18 (27.7)
State Employment Agency	7 (10.8)
Government Program	11 (16.9)
Private Agency	4 (6.2)
Non Profit Agency	1 (1.5)
None	24 (36.9)

Over half (53.8%) reported relying on themselves to find employment. Parents and friends were listed less frequently, 27.7% and 13.8% respectively, as sources in seeking employment. Teachers ranked highly with 30.8% of respondents indicating that teachers had helped them in securing employment. School counselors (3.1%), vocational rehabilitation counselors (2.0%), state employment counselors (0.0%) and others

(4.6%) accounted for a low proportion. If these variables are collapsed into two categories of finding work, such as "self-family-friend network," opposed to more institutional means such as job related services agencies, the military, or school personnel, this study's results supported Hasazi's (1985) findings that the majority (84%) of respondents found jobs through the "self-family-friend network." This result was similar to the findings of Azrin and Philip (1979). Using a job club model with nonhandicapped adults, Azrin and Philips reported that most job club members found their jobs using a "self-family-friend network". Interestingly, 30.8% of respondents in the present study indicated that teachers helped them find jobs. This was a sharp rise over the 5.4% reported by Hasazi et al. (1985). The comparison must be interpreted cautiously for two reasons. The first being that respondents of the present study were able to check all items that applied to the question. Secondly, respondents in this sample were all participants in a workstudy program headed by a work-study coordinator (teacher). When asked who helped them get a job, the respondents in the present study usually named their workstudy coordinator whom they considered a friend upon completion of their 12th grade academic program.

Use of community and service agencies. Next, the use of employment related service agencies was explored (see Table 7). Interestingly, 27.7% of the sample contacted vocational rehabilitation services, 16.9% utilized government programs, and 10.8% indicated that they had contact ed a state employment agency when seeking employment. A relatively small proportion used the services of a private employment agency (6.2%) or non-profit organizations (1.5%). These figures

contrasted with those of the Vermont Follow-up Study. In the Vermont Study, Hasazi et al. (1985) noted that only 11% of her sample had contacted vocational rehabilitation and developmental disabilities agencies (MHC/SRS). This contact rate was low compared with the contact rate with the generic state employment agency (35%) reported in the Vermont Study. Hasazi provided a rationale for the varying rates of contact by noting that the generic state agency was probably a familiar agency to many handicapped students. It was also an agency which she posited may have been used by the students' friends and family members and as such had no "stigma" associated with it. The rate of contact with vocational rehabilitation services noted in the present study is comparable to that of the Colorado Follow-Up study (1985) which reported that 36% of respondents who had been enrolled in a workstudy program and 31% of those who were in self-contained programs had used vocational rehabilitation services.

Perhaps this increased rate of contact with vocational rehabilitation services reported in the Colorado Study and in the present study may be attributed to the increased visibility and improved linkages of vocational rehabilitation personnel in the public school. In accordance with recent legislative mandates, vocational rehabilitation counselors have actively solicted handicapped student participation in their programs and made initial contacts with many level IV respondents prior to the completion of the 12th grade.

Summary. From the data regarding employment outcome, several observations of salient characteristics of the sample of respondents can be made. The majority of respondents were employed on a full time

basis. Respondents earned minimum wage or better and a large percentage had been employed for over six months. There appeared to be a relationship between current employment and gender with a 90.9% employment rate for males compared with 52.4% rate for females. Students were most frequently employed in sales/clerical and service occupations. They worked mainly in an unskilled or semi-skilled capacity. In finding employment, respondents relied heavily upon a "self-family-friend' network. Few respondents used community and service agencies when seeking employment.

Question 3: Satisfaction with Job and High School Program

Another variable examined in this study was the participant's perceived satisfaction with their current job and their high school program. A five point Likert scale ranging from very satisfied, satisfied, neutral, dissatisfied, to very dissatisfied, was used to report levels of satisfaction with student's current job. A similar five point scale including the anchors of well prepared, somewhat prepared, unsure, not well prepared, and unprepared was used to record student satisfaction with aspects of their high school program regarding preparation for entry into the world of work. Detailed results are presented in Appendices A and B.

Job satisfaction. Participants were asked to rate their general satisfaction with their job. Participants were also asked to rate their job on 11 variables including salary, benefits, potential for advancement, supervision, co-workers, pace of work, facilities, working conditions, variety of tasks, job security, and working conditions. The results are recorded in Appendix A. Overall, 90.2% were satisfied

or very satisfied with the their current job. For each of the variables, percentages of those respondents satisfied and very satisfied ranged between 70.6% (satisfaction with salary) to 98% (satisfaction with safety on the job). In general, students were satisfied with all with all aspects of their jobs although the level of satisfaction varied among variables.

These results agreed with earlier findings regarding job satisfaction In the Colorado Follow-Up Study, Mithaug, Horiuchi, and Fanning (1985) reported that 63% of employed graduates somewhat or very much liked their jobs. Studies by Brolin, Durmond, Kromer, and Miller (1974) and Boyce and Elzey (1978) also noted that the majority of respondents were satisfied with their jobs.

Satisfaction with high school program. Generally, level IV respondents responded positively to questions about their high school programs (see Appendix B). Of all respondents interviewed, 84.6% indicated that they were somewhat to well prepared by their high school program for entry into the job market. Reviewing the responses of those not employed at the time of the interview, 78.6% reported that they were somewhat to well satisfied with the preparation they received from their program. Of those employed 86.3% were somewhat to very well satisfied with the preparation they received to enter the job market.

In terms of how well their high school program prepared them to find work (search, apply and interview) respondents once again gave high marks. Overall, 89.2% felt that they were somewhat to well prepared to find work. Comparing the responses of respondents who were not employed at the time of the interview and those who were employed revealed

little difference, 85.7% and 90.2%, respectively. These findings are similar to the Colorado Follow-Up Study (1985) which reported that 68% of those interviewed felt their school program somewhat to very useful in preparation to perform acceptable work. Sixty-nine percent indicated that their high school program was somewhat to very useful in preparing them to search, apply and interview for jobs. In regard to those under employed, Powers and Lewis (1976) who followed hearing impaired students found that 68% did not have full time jobs, yet most were satisfied with their high school program. The high ratings of their program given by those presently unemployed at the time the present survey was conducted appear to confirm the earlier findings of satisfaction with high school program regardless of employment status.

Summary. Overall level IV respondents were satisfied with their present job. Although all 11 aspects of their job were highly rated, students reported that the most satisfying aspects of their jobs were coworkers, equipment, variety of tasks, and supervisors. In terms of satisfaction with their high school program in preparing them to find a job and enter the job market, students, regardless of employment status, answered positively.

Question 4: Types of Work Experiences and Training Prior to and After Leaving High School

Participants were asked to respond to questions regarding the types of work experiences and training which they received prior to and after leaving high school. In regard to training and work experiences prior to leaving high school, interview items solicited information concerning participant's school, work, and training experiences prior to leaving

high school. Seventy-two percent of the respondents interviewed reported that they had at least one summer job while in high school. Of those with summer jobs only 25% were subsidized while 75% were employed in unsubsidized positions. The data also indicated that 95.7% of these jobs had a duration of six or more weeks. Full time employment (35 hours or more per week) comprised 43.5% of these jobs. The majority of summer employment (56.5%) consisted of part-time employment. The classification of these jobs using the Dictionary of Occupational Titles (U.S. Employment Office, 1965) provided the following breakdown: 4.3% were professional, technical, or managerial positions; 34.0% were sales and clerical positions; 29.8% were service related positions; 12.8% were agriculturally related jobs; 12.8% were jobs in the structural category, while the remaining 6.4% were classified as miscellaneous.

When asked whether they had job experiences besides their workstudy job during the school year, 64.6% responded negatively while 35.4% stated that they had outside employment during the school year. Upon completion of the 12th grade, 35.9% of those surveyed indicated that they remained at their workstudy position while 64.1% left their workstudy job.

Finally, the relationship of summer jobs to current employment produced interesting findings. Of those respondents who had no summer jobs, 55% were employed, versus rates of 80% for those who had subsidized summer jobs, and 89% for those who had nonsubsidized jobs. These findings are similar but higher than those of the Vermont Study (1985). The Vermont Follow-Up Study reported an employment rate of 37% for

those who had no summer jobs, versus employment rates of 46% for those who had subsidized jobs and 69% for those who had nonsubsidized summer jobs.

Types of training and courses taken after leaving high school. Information was obtained on the respondents' educational and vocational activities after high school. The results are presented in Table 8. Sixty percent of the respondents did not report taking courses

Table 8

Types of Training/Courses Level IV Respondents Pursued After Leaving High School

Variable	f(%)
Training/Courses Since High School (n=65)	
No	39 (60)
Yes	26 (40)
Location/Setting of Training/Courses (n=65)	
Vocational Center	2 (3.1)
Community Center	1 (1.5)
Night School	1 (1.5)
Job Training Program	11 (16.9)
Apprenticeship Program	3 (4.6)
Private Agency	5 (7.7)
Vocational Rehabilitation	2 (3.1)
Community College	4 (6.2)
Courses (n=22)	
Home Economics	1 (4.5)
Trades	4 (18.2)
Business Education	6 (27.3)
Health Education	3 (13.6)
Other	8 (36.4)

after high school. Those who continued their education most often attended classes at job training programs (16.9%), private agencies specializing in job training (7.7%), community colleges (6.2%), or apprenticeship programs (4.6%). A relatively small proportion received training through vocational rehabilitation services (3.1%) or attended classes at night school and community centers (1.5%). These findings appeared consistent with those of Mithaug, Horiuchi, and Fanning (1985) who reported that 50% of those interviewed in the Colorado Follow-up Study did not enroll in classes after high school. In contrast to this study's findings these researchers noted that their respondents most often attended community college (18%), state college or university (13%), or other (14%). A small proportion of respondents of the Colorado Study (8%) and in this study (3.1%) attended a vocational or technical school, or was enrolled in an apprenticeship program.

Examining the types of courses taken after leaving high school the following results were noted. Over 36% of respondents reported having taken classes in the category listed as other (courses such as self-improvement, vocational preparation and readiness, basic reading and math). Business education (27.3%), trades (18.2%), and health education courses (13.6%) were categories of courses most often taken by respondents while home economic courses (4.5%) registered the smallest proportion. Only 6.2% of those interviewed reported taking a second course since leaving high school.

Summary. The following observations can be made from the data concerning the types of work experiences and training level IV respondents received prior to and upon leaving high school. All of the level IV

students were enrolled in a workstudy program during high school. Besides their workstudy job experiences, the majority of respondents reported having summer jobs usually on a part-time basis lasting six weeks or more. Most of the summer jobs were in the retail/clerical or service areas. A small percentage indicated that they also had a job besides their workstudy placement during the school year.

In regard to their training since leaving high school, the majority of Level IV respondents reported that they had not pursued postsecondary training. Of those responding affirmatively, job training programs were most frequently cited as sources of training and education. Courses in which respondents most frequently enrolled included miscellaneous category, business education, trades, and health education.

Question 5: Postschool Social Adjustment of Level IV Respondents

One of the purposes of this study was to solicit information regarding the social adjustment of postsecondary handicapped respondents. Participants were requested to respond to a variety of items concerning their present marital status, place of residence, type and frequency of social activities, friendship patterns, and mobility (see Table 9). Respondents were also given the opportunity to indicate their satisfaction with various aspects of social life. Few studies have collected similar relevant data regarding postsecondary social adjustment variables therefore comparisons will be limited. The data collected in the present study may provide the basis for a descriptive composite of the social adjustment of level IV students and may serve as baseline data for future research.

Marital status. Concerning marital status, the majority of respondents were single (96.9%) while the remaining were married (see Table 9). Of those responding 9.2% of the sample reported that they had one child while 4.6% indicated that they had two children. In light of these two statistics, it appears that there were 8 single parents within this sample. Only one married couple reported having a child. These statistics differ from those of the Colorado Follow-up Study. In that study researchers reported that 78% of the respondents were single, 20% were married and 2% were divorced. Of those married, 61% had one or more children. The present study's results seemed to indicate that a larger percentage of this sample remained single and that a number of single parents were members of the sample. Reviewing data on the status of never-married by sex indicated that 90.5% of the females and all males (100%) were single. These percentages were higher than those reported in the Colorado Follow-Up Study (1985). Research in Colorado found that 84.5% of the males and 72.2% of the females interviewed were single. The findings seems to indicate that females were more likely to be married than male respondents. National data (U.S. Census Bureau, 1985) on the status of never-married by age and sex indicated that in 1985 there were 75.6% men and 58.5% women between the ages of 20 and 24 in this category. As previously cited, the present study's sample reported much higher percentages of men (100%) and women (90.6%) who had never been married.

Table 9

Frequencies and Percentages of Factors Related to the Post High School Social Adjustment of Level IV Respondents.

Variable	f(%)
Marital Status (n=65)	
Divorced	0 (0.0)
Married	2 (3.1)
Single	63 (96.9)
Number of Children	
0	56 (86.2)
1	6 (9.2)
2	3 (4.6)
Place of Residence	
Parent/Guardian	54 (83.1)
Spouse's Parent(s)	0 (0.0)
Independent (Single)	7 (10.8)
Independent (Married)	1 (1.5)
Supervised Apartment	1 (1.5)
Other	2 (3.1)
Preference for Residence	
Home	15 (23.4)
Independent	49 (76.6)
Reason Why Live at Home	
Expense	40 (71.4)
Choice	10 (17.9)
School	1 (1.8)
Saving Money	1 (1.8)
Child Care	4 (7.1)
Possession of Driver's License	
No	36 (54.7)
Yes	29 (45.3)

Residential status. Another postschool social adjustment variable which this study examined was place of residence. As shown in Table 9, an overwhelming majority (83.1%) reported that they resided with their parents/guardians. Only 10.8% indicated that they were single and living independently. Relatively small proportions stated that they were married and living independently (1.5%) or that they lived in supervised housing (1.5%). The remaining 3.1% found housing under the category named "other". These findings are consistent with the data reported in earlier research (Connley, 1980; Gonzali, 1972; Saenger, 1957) that the majority of the respondents continued to live at home. More recent studies (Colorado Follow-Up Study, 1985; Vermont Follow-Up Study, 1985) indicated that the largest proportion of respondents (64%) lived with their parents or guardians. A small proportion indicated that they had their own homes (6%) or lived in an apartment by themselves. Sixty-four percent of those interviewed in the Vermont Study also resided with their parents or guardians. The current study's figure of 83.1% indicated a large increase in the number of students residing at home.

Reasons as to why they reside with their parents were provided by those surveyed. More than 70% listed expense as the reason why they live with their parents. Choice (17.9%) and need for childcare services (7.1%) were the next most frequently selected reasons. Saving for a car, etc. (1.8%) and school (1.8%) accounted for only small percentages. Inspite of the necessity to reside at home, 75.4% of those surveyed reported that they would prefer living independently if possible.

Types of social activities. Data were solicited from respondents regarding their participation in seven leisure time activities including church attendance, movie attendance, T.V. viewing, visiting recreation centers, engaging in sports and other hobbies as well as "hanging out" (congregating in malls or various other neighborhood locations). These seven activities were selected to determine the degree of social activity of the handicapped respondent. Participants were asked if they participated in each of the activities. If they responded affirmatively, they were asked how frequently they engaged in these activities and whether they participated alone or in the company of friends or family members. A detailed account of the results is provided in Appendix C.

Overall the results seemed to suggest that television viewing is the universally accepted leisure time social activity (100%). The majority of respondents indicated that they went to movies (89.2%) and attended church (63.1%) on a regular basis. Smaller proportions of the sample reported going to the recreational center in the community (44.5%), "hanging out" defined as congregating in the neighborhood (41.5%), participating in sports (43.1%) or having hobbies (38.5%). The frequency of these social activities and the manner in which they participated varied. For instance, most respondents reported attending church (65.9%) four times per month. Church attendance was a family social activity for over 83.3% of the respondents as they attended church with one or more family members. Movie attendance, sports, visiting the recreational center and "hanging out" were social activities which involved friends where as hobbies appeared to be an individual activity.

The pattern of social participation in terms of the number of no responses to each activity reported by level IV respondents was examined. A count was made of the number of activities in which each participant did not engage. Table 10 reflects these data. A no response to five or six activities indicated that participants were socially inactive. Only 8 (12.5%) of level IV respondents indicated that they did not participate in five of the seven social activities. The majority (73.4%) of the respondents reported engaging in four or more of the listed activities. This finding seemed to suggest a relatively active social life in terms of participation in leisure time activities.

Table 10

Frequency and Percentage of Level IV Respondent Who Did Not Participate In One or More of the Seven Social Activities

Count of No Responses (n=64)	f(%)
1	10 (15.6)
2	19 (29.7)
3	18 (28.1)
4	9 (14.1)
5	7 (10.9)
6	1 (1.6)
7	0 (0.0)

The findings concerning social contacts of subjects with friends and social activities can be compared to those of the Colorado Follow-Up Study (1985). The Colorado Study (1985) found that the most frequent

social contacts of subjects were with a friend (81%) who visited between one and five times per week. The present study's results are similar in that most activities involved the participation of friends. The Colorado Study (1985) also suggested that a relatively large percentage of respondents were socially inactive (42%). The present study found that 26.6% of the respondents appeared to be socially inactive (participating in three social activities one of them being television viewing). Only 1.6% of the present study's respondents indicated that they participated in only one social activity besides television viewing.

Friendship patterns. When questioned whether or not they had any special friends, 76.9% of those interviewed reported affirmatively. Of those responding "yes" 16.3% were able to name one friend while 83.7% were able to list the names of two friends. In terms of classifying who consitituted a friend, the majority of students (66.2%) reported that their friend was the same age. Others indicated that their friends were family members (6.2%), coworkers (6.2%), teachers (4.6%), or counselors (3.1%). Twenty-four percent of the respondents reported not having any special friends. Only one study, the Colorado State Follow-Up Study (1985) reported similar data concerning friends. The Colorado Study indicated that 18% of those surveyed reported no visits/contact with friends. The current study's figure of 24.1% of the participants who indicated that they did not have any special friends was slightly higher than that reported in the Colorado Study.

Possession of a driver's license. Possession of a driver's license suggests a greater level of mobility and financial responsibility (i.e., for insurance, gas, upkeep, etc.). More than half (54.7%) of those

interviewed did not have a driver's license. Only 45.3% reported having a driver's license. This finding is similar to that of the Colorado Study (1985) which indicated that 53% of those interviewed drove a car or motorcycle to work. It must be noted, however, that the Colorado Study's figures may be misleading due to the fact that only 33% reported having auto insurance. Of the 53% who drove, no accurate indication was provided as to how many actually had driver's licenses. Only one study involving hearing impaired adults (Powers & Lewis, 1976) collected data regarding the variable, possession of a driver's license. Of the 187 students surveyed 87% possessed driver's licenses. Comparisons between the two studies must be viewed cautiously due to the variety of handicapping conditions of individuals within the present study. Another factor which should be considered when reviewing the statistics regarding handicapped student's possession of a driver's license is the availability of public transportation. The metropolitan area provides readily available and relatively inexpensive bus and metrorail transportation which may enable respondents to get to and from work or social activities. The availability of public transportation coupled with the high cost of car ownership, insurance, and maintenance may influence a respondent's decision to pursue a driver's license. The data reported in this study represent baseline data concerning this variable.

Satisfaction with social life. Participants were asked to respond to questions regarding their satisfaction with social life using a five point Likert scale. The five anchors included very satisfied, satisfied, neutral, dissatisfied and very dissatisfied. Students were

also questioned concerning the best aspects of their social life and those aspects that needed improvement. Tables 11 and 12 depict the results.

Although the majority reported being satisfied (53.8%) or very satisfied (12.3%), 29.2% expressd dissatisfaction with their social life. A small proportion (4.6%) were indifferent or neutral.

Table 11

Percentage of Responses to Items on Satisfaction with Social Life by Level IV Respondents.

Satisfaction with Social Life (n =65)	f(%)
Very Satisfied	8 (12.3)
Satisfied	35 (53.8)
Neither Satisfied or Dissatisfied	3 (4.6)
Dissatisfied	13 (20.0)
Very Dissatisfied	6 (9.2)

These results are similar but higher than those of the Colorado Follow-Up Study (1985) which indicated that a majority (64%) of subjects were satisfied or very satisfied with their life. It also reported that 24% felt "OK" or "neutral" while only 13% stated that they were dissatisfied or very dissatisfied with their life. The present study revealed a decrease in those expressing neutrality (4.6% vs 13%) while noting an increase in the numbers of those dissatisfied with their social life (29.2% vs 13%).

Respondents were further questioned regarding the best aspects of their social lives and those which could be improved. The results of

the survey presented in Table 12, ranked money (28.1%), friends (21.9%) and boy/girlfriend (15.6%), prominently as the best aspect of their social life. Over 18% noted that there were no best aspect in social life. Smaller percentages listed "getting out" (7.8%), family (4.7%), husband/wife (1.6%), or fun (1.6%) as the best

Table 12

Frequency and Percentage of Responses to Items on Aspects of Social Life by Level IV Respondents

Aspect	f(%)
Which is the best aspect of your social life? (n=65)	
Friends	14 (21.9)
Boy/Girl Friend	10 (15.6)
Husband/Wife	1 (1.6)
Family	3 (4.7)
Fun	1 (1.6)
Getting Out of the House or Apartment	5 (7.8)
Money	18 (28.1)
There is No Best Aspect	12 (18.8)
Which aspect of your social life could be better? (n=65)	
Friends	4 (6.2)
Boy/Girl Friend	12 (18.5)
Husband/Wife	0 (0.0)
Family	3 (4.6)
Fun	2 (3.1)
Getting Out of the House or Apartment	8 (12.3)
Money	24 (36.9)
Having More to Do	5 (7.7)
Everything is Fine	7 (10.8)

facet of their social life. In terms of aspects of their social life that could be better, money (36.9%) once again was the first choice. Friends (6.2%), boy/girfriend (18.5%) and parents (4.6%) accounted for lesser percentages as did "getting out more" (12.3%), having more to

do (7.7%) and fun (3.1%). Over 10% indicated that everthing in their social life was fine.

Summary. Reviewing the data regarding the factors related to postschool social adjustment of level IV responddents, the following observations can be made. Most respondents were single and resided with their parents/guardians. Although respondents preferred to live independently, financial constraints appeared to make them dependent on parents/guardians for housing. Less than half of those surveyed possessed a driver's licenses. Many respondents engaged in a variety of social activities with friends or family on a regular basis. The majority of respondents reported having friends most of whom were same aged peers. In general, level IV respondents appeared satisfied with their social life although a relatively large percentage (29.2%) expressed dissatisfaction. The aspect most valued by respondents were relationships while money was the most frequently selected aspect of social life which needed improvement.

Level I -III Results

Response Rate

Of the 60 level I-III special education students randomly selected for interviews, 46 were located and surveyed. This represented a response rate of 77%. The remaining 14 interviews were not completed for several reasons. Ten (16.66%) participants were unable to be located after an extensive search had been undertaken. Three (5%) were located but declined to participate and one individual was deceased. The majority (82.6%) of the interviews were conducted in person. Only eight (17.4%) participants were surveyed by phone. With respect to the level of special education services received by respondents, only two (4%) received level I services. School records indicated that thirty-two (70%) received level II services while the rest, 12 (26%) were enrolled in level III resource programs.

Table 13

Response Rate for Level I-III Respondents

Variable	f (%)
Interviews	
Attempted	60
Completed	46 (77.0)
Not Interviewed	14 (23.0)
Deceased	1 (1.3)
Declined	3 (5.0)
Unable to locate	10 (16.7)
Type	
Personal	38 (82.6)
Telephone	8 (17.4)

Question 1: Demographics

During each interview basic demographic data were collected on

each of the former level I-III students. Background information included sex, racial composition of the sample, manner of exit from high school, and parental employment status. Table 14 presents the demographic data for Level I-III respondents.

Sex. The sample consisted of 20 females (43.5%) and 26 males (56.5%). As in earlier studies (Hasazi, Gordon, & Roe, 1985 and Mithaug, Horiuchi, & Fanning, 1985) men outnumbered women. This sexual distribution was somewhat different from that reported in the Colorado State Follow-Up Study (1985) and the Vermont Follow-Up Study (1985). In both studies females comprised between 35% to 37% of the total sample. The present findings suggested a shift in the distribution as evidenced by the slightly larger percentage (43.5%) of females represented in the sample.

Table 14

Demographic Data for Level I-III Respondents

Variable	f (%)
Level of Service	
Level I	2 (4)
Level II	32 (70)
Level III	12 (26)
Sex	
Female	20 (43.5)
Male	26 (56.5)
Race	
Black	27 (59)
Caucasian	18 (39)
Other	1 (2)
Manner of exit from school	
Graduated	44 (96)
Dropped out (under 18)	2 (4)
Left (18 and over)	0 (0)

Race. Racially, 59% of those surveyed were black, 39% were caucasians, and 2% were listed as other. Of the 27 blacks, 11 were females and 16 were males. Ten caucasians were male and eight female. One female indicated that she was oriental. This racial distribution appeared to be consistent with that of the student population in the county. The racial breakdown was reported as follows: 57% black, 39% caucasian, and 4% other. The sample interviewed seemed to be respresentative of the school district.

Manner of exit from school. Of the participants interviewed 44 (96.%) graduated from high school receiving a regular diploma. Two (4%) dropped out of school prior to their 18th birthday. These statistics regarding the manner of exit from school are similar to those reported by the Colorado Follow-Up Study (1985). Researchers in Colorado noted that 93.9% of respondents enrolled in a resource program graduated from high school receiving a regular diploma. The graduation rate of 96% reported in the present research differed from the findings reported in the Vermont Follow-Up Study (1985). Reseachers in Vermont found that 66% of those sampled graduated, 23% dropped out before age 18 while 11% left school after their 18th birthday. The sample, unlike that of the Colorado Study, was not broken down by program enrollment and therefore represented the broad spectrum of all special education programs. This factor may partially explain the differences in graduation figures. Comparisons of graduation statistics must also be undertaken cautiously for two reasons. First, discrepancies may be due to the differences in graduation requirements from state to state. Second, the present study sampled

participants in one county within one state whereas the two previously cited studies sampled students throughout an entire state's education system.

Parental employment. Data were gathered from those surveyed regarding the employment status of their father and/or mother or guardian if appropriate (see Table 15). Twenty-six (56.5%) indicated that their father was employed. Respondents reported that 42.3% of their fathers worked in semi-skilled jobs, 30% held skilled positions while 27% worked in an unskilled capacity as shown in Table 13. Seven respondents (15.2%) reported that their father was retired and 5(10.9%) indicated he was decease. Only 2 (4.3%) noted that their fathers were unemployed.

Table 15

Occupation and Skill Level of Parents of Level I-III Participants

Variable	f (%)	
Parental occupation	father (n=46)	mother (n=46)
Not applicable	2 (4.3)	0 (0.0)
Semi-skilled	11 (23.9)	11 (23.9)
Skilled	8 (17.4)	1 (2.2)
Unskilled	7 (15.2)	4 (8.7)
Unemployed	2 (4.3)	4 (8.7)
Not in labor force	1 (2.2)	1 (2.2)
Disabled	0 (0.0)	0 (0.0)
Retired	7 (15.2)	2 (4.3)
Deceased	5 (10.9)	0 (0.0)
Homemaker	0 (0.0)	17 (42.5)
Missing data	3 (6.5)	6 (13.0)
Skill level	father (n=26)	mother (n=16)
Semi-skilled	11 (42.3)	11 (68.7)
Skilled	8 (3.0)	1 (6.3)
Unskilled	7 (27.0)	4 (25.0)

In regard to their mother's occupation, 16 (40%) reported that their mothers were employed. Of those employed 68.7% worked in semi-skilled positions, 6.3% in skilled positions and 25% worked in an unskilled capacity (see Table 15). Seventeen respondents (37%) indicated that their mother was a homemaker. Smaller percentages reported that their mothers were not employed (8.7%) or were retired (4.3%) as shown in Table 15.

Summary. The following are salient characteristics of the sample which can be summarized from the demographic data. The majority of respondents were male. Racially, blacks comprised the largest percentage of respondents (59%) while caucasians accounted for 39%. A small proportion of the sample (4%) listed their race as "other". Nearly all of the respondents graduated from high school. The employment rate of father's (56%) was higher than that of mother's (40%). An equally large percentage of mothers (37%) were homemakers.

Question 2: Employment Outcome

Employment outcome data of level I-III respondents were collected during each personal/telephone interview. The variables included: (a) current employment status, (b) wages, (c) type of employment, (d) positive employment outcome, (e) manner of finding employment, and (f) use of community and social agencies in seeking employment. Table 16 depicts the postschool employment data for Level I-III respondents.

Table 16

Postschool Employment Data for Level I-III Respondents

Variable	f (%)
Current Employment Status	
Employed	29 (63)
Not Employed	17 (37)
Not in labor force	11 (24)
Unemployed	6 (13)
Employment	
Hours/week	
Full time (>35 hrs)	22 (76)
Part time (1≤ 34 hrs)	7 (24)
Skill Level	
Semi-skilled	14 (51.9)
Skilled	1 (3.7)
Unskilled	12 (44.4)
Length of Employment	
> 1 mo. < 6 mos.	3 (10.3)
> 6 mos. < 1 yr	5 (17.2)
≥ 1 yr < 3 yrs.	21 (72.4)
Wages/Hour	
<$3.35	0 (0.0)
$ 3.35 (minimum wage)	4 (13.8)
$ 3.36 - 5.00	13 (44.8)
≥ $ 5.01	12 (41.4)

Employment status. Of the 46 respondents interviewed 29 (63%) were currently employed while 17 (27%) indicated that they were not working. Eleven (24%) of those who reported that they were not employed were students, disabled or homemakers and consequently categorized as "not in the labor force" by U.S. government definition. Six (13%) constituted the category defined as unemployed. The majority of those working (75.9%) were engaged in full time employment consisting

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of 35 or more hours per week. The remaining 24% were engaged in part time employment with hours varying between one and 34 per week. Of those employed 25 (86.2%) worked in nonsubsidized positions. Only three (10.3%) reported working at jobs subsidized by the government. A comparison of employment status by gender as presented in Table 17 indicated that 80.8% of the males and 40% of the females were employed. The majority of those employed (96.3%) worked at positions classified as unskilled (44.%) or semi-skilled (51.9%).

Table 17

Employment Status by Gender of Level I-III Respondents

Variable	f (%)
Female (n =20)	
Employed	8 (40)
Not Employed	12 (60)
Male (n =26)	
Employed	21 (80.8)
Not Employed	5 (19.2)

A very small proportion (3.7%) were employed at skilled positions. Twenty-four students (82.8%) who were employed had permanent positions. Five (17.2%) categorized their jobs as seasonal or temporary.

These basic data regarding the employment status of respondents appeared consistent with the findings of earlier studies using similar samples. The Colorado State Follow-Up Study (1985) reported an employment rate of 69% for its graduates. In contrast to this study's findings, only 32% of those surveyed in Colorado indicated that they were employed full time as compared to the 75.9% reported in this

study. A second survey conducted in Vermont, by Hasazi, Gordon, and Roe (1985) reported that 67% of the respondents were engaged in full time employment and that virtually all (99%) were employed in nonsubsisidized positions.

The findings regarding employment by gender (80.8% males employed compared with 40% of the females) supported those of the Vermont Follow-Up Study (1985) which reported that gender was related to current employment status (66% of males employed compared with 33% of the females.)

Earlier research including the Vermont Follow-Up Study (1985) provided employment data which reported only the percentages of respondents who were employed. The present study attempted to ascertain the percentage of respondents who were unemployed. The study used the Bureau of Labor Statistics' definition of unemployment. According to this definition unemployed persons include all individuals who during the reference period had no employment but made specific efforts to find a job during the prior 4 weeks. Individuals who were waiting to be recalled for a job from which they had been laid off or waiting to report to a new job within 30 days were also classified as unemployed (Statistical Abstract of the United States, 1985). Using a similar definition, the Colorado Follow-Up Study (1985) reported that 19% of the respondents interviewed were unemployed and looking for work. The present study reported a lower unemployment rate of 13%.

The unemployment rate of 13% for level I-III respondents was comparable to the national and state figures for the same age group. National statistics (Bureau of Labor Statisitics, 1985) indicated

13% of the individuals between the ages 18 and 24 were unemployed. The state unemployment figure was a slightly higher at 14.6% (Maryland Department of Employment and Training, 1985). Local statistics contrasted greatly with those reported in this study. Only 6.7% of those between the ages of 20 and 24 were unemployed (Maryland Department of Employment and Training, 1980). Consequently, respondents who appeared to be doing as well as their normal peers on the national and state level in terms of employment were almost twice as likely to be unemployed when compared with same aged peers within the county.

Wages. Another employment variable investigated in this study was wage earned per hour. All level I through III respondents reported earning at least minimum wage on their job. The majority (86.2%) earned more than minimum wage ($3.35). In fact, 44.8% earned between $3.36-$5.00 per hours (see Table 16). These figures were comparable to those reported by Hasazi, Gordon, and Roe (1985) in the Vermont Study. They indicated that 70% of those surveyed who had not participated in a workstudy program earned more than $3.35 per hour.

Analyzing hourly wages in terms of sex produced the following results. Of level I-III males, 4.8% earned minimum wage, 38.1% reported earning between $3.36-$5.00 per hour while 57.1% earned more than $5.00 per hour. The percentages for females vary from their male peers. Of the females, 37.5% indicated that they earned minimum wage. The remaining 62.5% of the female respondents earned between $3.36-$5.00 per hour. No female respondent reported more than $5.00 per hour. The results appear to indicate that there are

disparities in wages earned between handicapped males and females. Male respondents seem more likely to earn more money per hour than female respondents (95.2% of the males earned more than $3.36 per hour compared to 62.5% of the females). These findings are interesting in light of a recent report released by the Census Bureau. In a study entitled, "Women in the American Economy", the Census Bureau reported that there is a disparity in salaries between males and females with females earning 64% of what males earn and continuing to work in low paying occupations (Anderson, 1987). The findings of the present follow-up study suggest that this disparity may also exist within the handicapped population.

Classification of jobs. This study also solicited information regarding the types of positions held by participants. These positions were classified according to the Dictionary of Occupational Titles (U.S. Employment Service, 1965). The results are depicted in Table 18.

Table 18

Dictionary of Occupational Titles (DOT)

Classification of Current Jobs of Level I-III Respondents

D.O.T. Classification of Current Employment	f (%)
Professional/Managerial	2 (7.4)
Clerical/Sales	11 (40.7)
Service	4 (14.8)
Agriculture, Forestry	0 (0.0)
Processing Occupations	0 (0.0)
Machines and trades	4 (14.8)
Benchwork	0 (0.0)
Structural Occupations	2 (7.4)
Miscellaneous	4 (14.8)

Over 40% of the respondents indicated that they were employed in clerical or sales positions. Equal proportions of 14.8% were employed in the service, trade and miscellaneous categories. Only 7.4% reported having a professional or managerial position. The remaining 7.4% worked at positions labeled as structural. Employment figures in the present study supported the findings of earlier studies especially the Vermont Follow-up Study which found that the highest percentage of respondents (21.4%) worked in clerical or sales positions. The lowest percentage (2.9%) were employed at the professional or managerial level.

Positive employment outcome. This study attempted to assess the employment outcome of former students, both positive and negative. A positive employment outcome was defined as the engagement of an individual in work either subsidized or unsubsidized for minimum wage or better in a full time or part-time capacity for a duration of six months or longer. The results of this survey indicated that 63% of the level I-III special education sample was employed at the time of the interview. Most (86.2%) respondents indicated that they were engaged in unsubsidized positions. All respondents reported earning minimum wage or better. Over 86% reported earning more than $3.35 per hour. In regard to the length of employment 10.3% reported working for a period of time of one to five months. More than 17% worked for more than six months but less than one year. The majority (72.4%) stated having been employed for more than one year. Taking all factors, into account 89.6% of those employed had a positive employment outcome.

Examining the skill level of the respondents' positions resulted in the following distribution. Over half (51.9%) indicated working at a position characterized as semi-skilled. More than 44% worked in an unskilled capacity. Only 3.7% worked at positions classified as skilled. These findings supported those of earlier studies involving EMR students (Carriker, 1957; Cassidy and Phelps, 1955; Dinger, 1958; Kennedy, 1962; Peterson, 1959) which reported that the largest proportions of those surveyed were engaged in semi-skilled and unskilled positions.

Manner of finding employment. Participants were asked how they found work. Respondents could list more than one source when answering the item. Table 19 shows the response of Level I-III respondents.

Table 19

Persons and Agencies Helpful in Finding Jobs for Level I-III Respondents

Variable	f (%)
Person	
Self	35 (76.1)
Parent/Relative	14 (30.4)
Teacher	8 (17.4)
Counselor	4 (8.7)
Friend	11 (23.9)
Vocational Counselor	0 (0.0)
State Employment Counselor	0 (0.0)
Other	0 (0.0)
Agency Contacted	
Vocational Rehabilitation	7 (15.2)
State Employment Agency	1 (2.2)
Government Program	8 (17.4)
Private Agency	1 (2.2)
Non Profit Agency	0 (0.0)
None	29 (63.0)

The majority of level I through III respondents (76.1%) who answered the item reported relying on themselves to find employment. More than 30% cited having been helped by a parent or relative. Approximately 24% stated that they received assistance from friends. Smaller proportions relied on teachers (17.4%) or counselor (8.7%). Interestingly, vocational counselor, state employment counselor, and others were sources which were virtually not utilized by students. Collapsing all eight items into two categories, "self-family-friend network" and institutional personnel revealed that the majority of respondents used the former as the means of finding employment. This finding supported the data of earlier research by Hasazi, Gordon and Roe (1985) which indicated that most (84%) handicapped respondents found work through a "self-family-friend" network. Similar results were obtained in a study involving the nonhandicapped (Azrin & Philip, 1979) which reported that most of the individuals used a network of significant others (self, friends and relatives) to locate employment opportunties.

Use of community and service agencies. Another variable explored was the utilization of community and service agencies in securing employment (see Table 19). Participants were asked to respond to items inquirying as to which agency/agencies they used when attempting to find a job. Small proportions of the sample reported contacting a vocational rehabilitation agency (15.2%), a state employment agency (2.2%), government program (17.4%), or a private agency (2.2%). Twenty-nine respondents (63%) indicated that they had not used any of the listed agencies in seeking assistance for employment. These

statistics for vocational rehabilitation were smiliar to those reported by earlier studies (Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi & Fanning, 1985). The Colorado Study (1985) reported that only 13.5% of respondents who had been enrolled in a resource program had ever used the services provided by vocational rehabilitation. Researchers involved with the Vermont Follow-Up Study reported that only 11% of those surveyed use the services of a vocational rehabilitation counselor.

Summary. Overall the employment data indicated that the majority of level I-III respondents were employed. Of those employed three fourths worked on a full time basis. A sizable percentage of respondents (23.9%) indicated that they were students, disabled, or homemakers thus eliminating them form the labor force. Gender appeared to be a factor related to current employment (80% of the males employed compared with 40% of the females). All working respondents earned minimum wage ($3.35) or better per hour. Few performed skilled labor while the majority were hired in unskilled or semi-skilled capacities. In regard to the types of jobs, the largest percentage of respondents were employed as sales or clerical personnel. Taking into consideration the factors of length of employment (6 months or more) and wage (minimum wage or better) used to define a positive employment outcome, the majority of respondents (89.6%) experienced a positive employment outcome.

Respondents relied heavily on a 'self-family-friend' network in finding employment. Participants also cited vocational rehabilitation services, state employment agencies and government programs as helpful

in seeking employment although the majority indicated that they had never contacted community or service agencies.

Question 3: Satisfaction with Job and High School Program

Another variable explored in this study was the respondent's perceived satisfaction with their current job and their high school program. A five point Likert scale ranging from very satisfied, satisfied, neutral, dissatisfied, to very dissatisfied was used to report levels of satisfaction with the respondent's current job. A similar five point scale including the anchor points of well prepared, somewhat prepared, unsure, not well prepared, and unprepared was used to record participants' satisfaction with aspects of their high school program regarding preparation for entry into the job market. Results of these questions are presented in Appendices D and E.

Job satisfaction. Over 89% of level I-III respondents reported being very satisfied or satisfied with their present employment. Only 6.9% felt neither satisfied or dissatisfied with their job while 2.2% indicated dissatisfaction. Participants were also questioned regarding their level satisfaction or dissatisfaction with various aspects of their job. Appendix D depicts the findings. In each of the 11 aspects the majority (satisfaction levels ranging from 59.2%, advancement, to 93.1%, coworkers) indicated that they were satisfied or very satisfied with all aspects of their jobs. These findings were consistent with those of earlier studies (Boyce & Elzey, 1978; Brolin, Durmand, Kromer, & Miller, 1974; Mithaug, Huriuchi, & Fanning, 1985) which reported that the majority of handicapped respondents were satisfied with their jobs.

Satisfaction with high school program. In general, Level I-III

respondents responded positively toward items regarding their high school program (see Appendix E). Of all respondents surveyed 80.4% reported being somewhat to well prepared by their program to find work (search, apply and interview). Isolating those who were employed at the time of the interview depicted Over 82% of those employed felt well prepared or somewhat prepared to find work. Of those not working 76.5% indicated satisfaction with their preparation to find work although a sizable proportion 17.6% reported that they were not well prepared by their high school program to find a job. Of all level I-III respondents surveyed 73.9% felt somewhat to well prepared while 17.4% felt not well prepared or unprepared for the job market. Focusing on those employed revealed that the majority 79.3% perceived themselves as being somewhat to well prepared for the job market. More than 17% reported being not well or unprepared for the job market. Of those surveyed who were not working 64.7% felt that their high school program prepared them somewhat for the job market, 17.6% were unsure and another 17.6% indicated that they were not well prepared for the job market.

These findings are similar to those reported by the Colorado Follow-Up Study (1985). Research data from that study indicated that 68% of those surveyed felt that their high school preparation was somewhat to very useful in performing acceptable work. In terms of the usefulness of their program in preparing them to search, apply and interview for jobs, 69% indicated that their program was somewhat to very useful. One study (Powers & Lewis, 1976) involving the hearing impaired also found high satisfaction with program among those not employed (68%). The high ratings of their program given by those

currently not employed at the time the present survey was conducted appear to confirm the earlier findings of satisfaction with high school program regardless of employment status.

Summary. Most respondents (89%) reported that they were satisfied with their present employment. This level of satisfaction was evident throughout all 11 aspects of the job with coworkers being cited as the most satisfying facet of work. Concerning satisfaction with high school program in regard to preparing the respondents to find a job and enter the job market, the majority of respondents whether employed or unemployed were satisfied with their program. Slight differences were noted in levels of satisfaction between those employed and unemployed.

Question 4: Type of Work Experiences and Training Prior to and After Leaving High School

Level I-III participants were asked to respond to items concerning the type of work experiences and training which they received prior to and after leaving high school. Items solicted were information regarding summer jobs and jobs held during the school year. Data were also gathered regarding the training programs and courses in which respondents enrolled after leaving high school.

Types of work experiences and training prior to leaving high school. Over 65% of all level I-III participants surveyed reported having at least one summer job thoughout their high school experience. Fifty-seven percent reported that they worked in unsubsidized positions while the remaining 43% indicated that their position was subsidized by government funds. The majority of these summer jobs were part-time (63%) and lasted for more than six weeks (90%). Most jobs were in the

area of sales or clerical (30.4%) although equal distributions were reported in the service (17.4%) structural (17.4%), and miscellaneous categories (17.4%). Agricultural and forestry positions accounted for 13% of all summer positions while professional and managerial positions registered the smallest proportion (4.3%). When asked whether they had a job during the school year, 61.4% responded negatively. Only 17 (38.6%) reported working sometime during the academic year.

The relationship of summer jobs to current employment yielded some interesting findings. Of the respondents who did not have summer jobs during high school 31% were employed as compared to employment rates of 53.8% for respondents who had subsidized summer jobs and 82.4% for respondents who had unsubsidized summer jobs. These findings are comparable to those reported by the Vermont Follow-Up Study (1985). The Vermont Follow-Up Study (1985) reported an employment rate of 37% for respondents who had no summer job work experiences, versus employment rates of 46% for those who had subsidized summer jobs and 69% for respondents who indicated that they had unsubidized summer jobs during high school.

Types of training and courses in which respondents enrolled since leaving high school. Data were collected from respondents regarding their educational and vocational activities since leaving high school. The results are presented in Table 20.

The majority of respondents (64%) reported that they had not enrolled in either an educational or vocational program since high school. The results show that respondents who pursued further education/training were most likely to attend a community college

(19.6%). Other frequently chosen settings were job training and apprenticeship programs (8.7% each). The most infrequently used setting for postsecondary education was the vocational center (2.2%). The community center, night school, private agencies, and vocational rehabilitation services were not cited by respondents as settings

Table 20

Types of Training/Courses Level I-III Respondents Pursued After Leaving High School

Variable	f(%)
Training/Courses Since High School (n=46)	
No	29 (64)
Yes	16 (36)
Location/Setting of Training/Courses (n=46)	
Vocational Center	1 (2.2)
Community Center	0 (0.0)
Night School	0 (0.0)
Job Training Program	4 (8.7)
Apprenticeship Program	4 (8.7)
Private Agency	0 (0.0)
Vocational Rehabilitation	0 (0.0)
Community College	9 (19.6)
Courses (n=15)	
Home Economics	0 (0.0)
Trades	2 (13.3)
Business Education	7 (46.7)
Health Education	0 (0.0)
Other	6 (40.0)

for further education (0%). Participants also reported the courses of study which they enrolled. Business education was the most popular area chosen (46.7%) while the "other" category, was also frequently selected (40%).

These results are similar to the findings of two studies (Buchanan & Wolfe, 1986; Mithaug, Horiuchi, & Fanning, 1985). In regard to the percentage of learning disabled students pursuing postsecondary education, Buchanan and Wolfe (1985) reported that 39% were currently enrolled in a variety of classes. The figure of 36% reported in this study is comparable. Due to the fact that many of the level I-III participants in the present study are classified as learning disabled this comparison appeared appropriate. Concerning the settings for postsecondary education, the Colorado Study researchers (Mithaug, Horiuchi, & Fanning, 1985) reported that respondents most often attended community colleges (18%). Smaller percentages attended a vocational/technical school (3.1%) or were enrolled in apprenticeship programs (3.1%). These findings were also consistent with those previously cited in the present study.

Summary. The data concerning the educational and training histories of the level I-III respondents revealed the following characteristics. The majority of respondents reported having summer job experiences which were part-time and had a duration of six or more weeks. These summer jobs were usually in positions classified as sales/clerical, service-related work, and structural occupations. The findings also seemed to suggest that a higher percentage of respondents who had summer work experiences were currently employed than those respondents who indicated that they did not have summer jobs. A small proportion of level I-III respondents reported working while attending high school.

Data concerning post high school training indicated that the majority of respondents had not enrolled in educational/training programs upon leaving high school. Those who pursued further

education/training most often attended the community college. Of the courses in which they enrolled, business education was the most frequently cited area of study for respondents.

Question 5: Post High School Social Adjustment

This study was designed to amass data concerning the postschool adjustment of handicapped individuals. The survey included items concerning the marital status, residential status, type and frequency of social activities, friendship patterns, and mobility (see Table 21). Participants were also requested to indicate their satisfaction with various aspects of their social life. This data provides a descriptive base for an analysis of the social adjustment of these handicapped students.

Marital status. The first variable investigated was marital status. Most respondents (93.5%) indicated that they were single. A relatively small proportion (6.5%) reported that they were married. When questioned about the number of children they had only 10.8% stated that they had one or more children. An examination of the interview protocols indicated the existence of two single parents within the sample. The statistic of 93.5% single reported in this study was higher than the 78% reported by the researcher of the Colorado Study (1985) who surveyed on similar cross categorical population of the handicapped individuals. The Colorado Study (1985) also reported a higher rate of respondents as being married (20%). This discrepancy may be due in part by the inclusion of older subjects in the Colorado Study (46% were 23 years or older) and the broader statewide scope of the sample.

Table 21

Frequencies and Percentages of Factors Related to the Post High School Social Adjustment of Level I-III Respondents.

Variable	f(%)
Marital Status (n=46)	
Divorced	0 (0.0)
Married	3 (6.5)
Single	43 (93.5)
Number of Children	
0	40 (87.0)
1	3 (6.5)
2	2 (4.3)
Place of Residence	
Parent/Guardian	38 (82.6)
Spouse's Parent(s)	1 (2.2)
Independent (Single)	1 (2.2)
Independent (Married)	2 (4.3)
Supervised Apartment	0 (0.0)
Other	4 (8.7)
Preference for Residence	
Home	5 (11.6)
Independent	38 (88.4)
Reason Why Live at Home	
Expense	25 (59.5)
Choice	6 (14.3)
School	7 (16.7)
Saving Money	2 (4.8)
Child Care	2 (4.8)
Possession of Driver's License	
No	21 (46.7)
Yes	24 (53.3)

Analyzing the marital data by sex indicated that 90% of the females and 96.2% of the males had never been married. These percentages were higher than those reported in the Colorado Follow-Up Study (1985). Researchers in Colorado found that 84.5% of the males and 72.2% of the females were single. These findings seemed to suggest that female respondents were more likely to be married than male respondents (married females 37.8% versus married males 15.5%). National data (U.S. Census Bureau, 1985) on the status of never-married by age (20-24 years old) and sex indicated that there were only 58.5% women and 75.6% men in this category.

Residential status. Another social adjustment variable investi- most respondents (82.6%) resided with their parents or guardians (see Table 21). Small proportions lived independently whether single (2.2%) or married (4.3%). These findings corroborate those of earlier studies (Coonley, 1980; Gonzail, 197; Hasazi, Gordon & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985) which reported that the majority of handicapped individuals continued to reside with their parents/guardians.

Concerning residence, participants were asked to state their preference. Thirty-eight (88.4%) responded that they would prefer to live independently rather than with their parents/guardians. Among the reasons listed for living at home the most frequently selected response was expense (59.5%). Other reasons cited included attending school (16.7%), choice (14.3%), saving money to buy a car, etc. (4.8%) and childcare (4.8%).

Types of social activities. Participants were also asked to respond to items regarding their social activities and frequency of

involvement (measured in times per month). These seven activities were selected to determine the degree of social activity and interaction of the handicapped respondent. During the interview respondents were asked if they participated in each of the activities. If they responded affirmatively, they were asked how frequently they engaged in the activity and whether they participated alone or in the company of friends and family members.

Appendix F provides a detailed account of results. The most universally embraced form of leisure activity was televison viewing (95.7%). Most respondents (81.8%) indicated that they watched more than four hours per day. Another highly rated social activity was attending movies (80%). Respondents reported that they attended movies at least once a month (75%). More than one half of those responding attended church (51.5%) or 'hung out' defined as congregating in the neighborhood, (56.5%). Hobbies (46%), and sports (39%) were less frequently chosen social activities. The frequency of involvement varied greatly from activity to activity. With the exception of church and movie attendance, most students participated in social activities three or more times per month.

The person(s) who engaged in these activities with the students also varied from activity to activity. Church attendance appeared to be a family activity (100%) while the majority of students reported watching T.V. (50%) and engaging in hobbies (73%) alone. Movies (86%), sports (52.6%), going to the recreation center (88.2%) and 'hanging out' in the neighborhood (100%) appeared to be friend oriented activities.

the pattern of social participation in terms of the number of no responses to each activity reported by level I-III respondentss was investigated. A count was made of the number of activities in which each respondent did not participate. Table 22 depicts these data. A no response to five or six activities indicated that particpants were socially inactive. Only 4 (8.6%) of level I-III students reported that they did not participate in five of the seven activities listed on the survey. These students were relatively socially inactive. The majority (60.9%) of students reported participating in four or more of the listed activities.

Table 22

Frequency and Percentage of Level I-III Respondents Who Did Not Participate in One or More of the Seven Social Activities

Count of No Responses (n=46)	f(%)
1	8 (17.4)
2	12 (26.1)
3	8 (17.4)
4	14 (30.4)
5	2 (4.3)
6	2 (4.3)
7	0 (0.0)

This appears to suggest that level I-III respondents have a relatively active social life in terms of participation in leisure time activities. Similar data concerning social contacts with friends and social activities was reported in the Colorado State Follow-Up Study

(1985). The Colorado Study reported that the most frequent social contacts of respondents were with friends (81%) who visited between one and five times per week. The present study's findings are comparable in that most activities involved participation or interaction with friends on a regular basis. The Colorado Study also noted that a large percentage of respondents were relatively socially inactive. In contrast, the present study found that 8.6% of level I-III respondents appeared to be socially inactive.

Friendship patterns. The area of friendship was also examined by this study. Students were asked to respond to items which solicited data regarding the number and nature of their friendships. Thirty-two (69.6%) responded affirmatively to the question of whether they have special friends. Of those responding positively, 27 (84.4%) could name two or more friends for the interviewer. When asked to categorize friends according to a given schema, 67.4% indicated that their friends were same age peers. Smaller proportions indicated that their friends were family members (8.7%), coworkers (4.3%), or the school counselor (2.2%). Only one study, the Colorado Follow-Up Study (1985) reported similar data concerning friends. The Colorado Study indicated that 18% of those surveyed had no visits/contact with friends. The present study's figure of 15.6% of students who indicated that they did not have any special friends was comparable to that reported in the Colorado Study.

Possession of a driver's license. In regard to mobility, respondents were asked if they possessed a driver's license.

Possession of a license appeared to suggest status as well as a greater level of mobility and financial responsibility (i.e., for insurance, gas, upkeep, etc.). Of those responding, 24 (53.3%) reported that they had a valid state driver's license. Twenty-one (46.7%) indicated that they did not possess a license. These statistics are comparable to those of the Colorado Study (1985) which noted that 53% of those interviewed drove a car or motorcycle to work. Only one other study (Powers & Lewis, 1986) which surveyed the hearing impaired reported a higher figure (87%) among respondents. Such comparisons must be made cautiously due to the fact that the present study represents a heterogeneous handicapped sample.

Another factor which should be considered when analyzing the data regarding handicapped students' possession of a driver's license is the availabilty of public transportation. The metropolitan area provides readily available and inexpensive bus and metrorail transportation which may enable respondents to get to and from work or social activities. The availabilty of public transportation, high cost of car ownership, insurance and maintenance fees may influence a respondents' decision to pursue a driver's license. The data reported in the study represent baseline data concerning this variable.

Satisfaction with social life. Particpants were asked to respond to questions regarding their satisfaction with social life. A five point Likert scale was used. The anchor points included very satisfied, satisfied, neutral, dissatisfied, and very dissatisfied. Participants were also asked to respond to items concerning the best aspects of their social life and those aspects which they felt needed improvement.

Results are depicted in Tables 23 and 24.

Thirty-six (78.3%) reported that they were satisfied or very satisfied with their social life. Only two (4.3%) indicated that they were neither satisfied nor dissatisfied with their social life. Eight individuals (17.4%) felt dissatisfied or very dissatisfied with their present social life.

After reporting their level of satisfaction participants were also questioned as to which aspects of their social life were the best and which ones needed improvement. The highest rated aspect was friendship (41.4%).

Table 23

Percentage of Responses to Items on Satisfaction with Social Life by Level I-III Respondents.

Satisfaction with Social Life (n =46)	f(%)
Very Satisfied	5 (10.9)
Satisfied	31 (67.4)
Neither Satisfied or Dissatisfied	2 (4.3)
Dissatisfied	7 (15.2)
Very Dissatisfied	1 (2.2)

If the items, friends, boy/girlfriend, husband/wife, and family are collapsed into one category, relationships, an interesting trend emerges. Thirty-two (69.5%) respondents reported that relationships were the best aspect of their social life. When asked which aspect could be better, 26 (56.5%) selected money.

As in earlier research (Mithaug, Horiuchi, & Fanning, 1985) most respondents indicated a general satisfaction with social life. The

Table 24

Frequency and Percentage of Responses to Items on Aspects of Social Life by Level I-III Respondents

Aspect	f(%)
Which is the best aspect of your social life? (n=46)	
Friends	19 (41.4)
Boy/Girl Friend	5 (10.9)
Husband/Wife	2 (4.3)
Family	3 (6.5)
Fun	3 (6.5)
Getting Out of the House or Apartment	4 (8.7)
Money	3 (6.5)
There is No Best Aspect	7 (15.2)
Which aspect of your social life could be better? (n=46)	
Friends	2 (4.3)
Boy/Girl Friend	4 (8.7)
Husband/Wife	0 (0.0)
Family	0 (0.0)
Fun	1 (2.2)
Getting Out of the House or Apartment	8 (17.4)
Money	26 (56.5)
Having More to Do	1 (2.2)
Everything is Fine	4 (8.7)

figure of 88% being satisfied or very satisfied with social life, is much higher than that reported in the Colorado Study (1985). In that research which surveyed a similar cross sectional sample, 64% of those responding indicated that they were satisfied or very satisfied with their social life.

Summary. In summarizing the postschool social adjustment of level I-III respondents the following observations can be made. The majority of participants were single and resided with their parent or guardian. Although most respondents indicated that they would rather live independently, financial dependence prevented this.

The majority appeared to actively participate in a variety of social activities with their friends or family. Many had friends who were same-aged peers. In general, the majority indicated that they were satisfied with their social life and regarded their relationships as being the best aspect of their social life while financial status was the most frequently cited aspect needing improvement.

CHAPTER 5

Summary and Conclusions

This final chapter presents a summary of the study and provides responses to the questions posed in Chapter 1. Conclusions are drawn and implications are made.

Summary of Results

Increasing concern has been raised by parents, educators, and rehabilitation professionals regarding the plight of handicapped individuals once they graduate or leave school programs (Hasazi, Gordon, & Roe, 1985). One of the major issues confronting researchers, policy makers, and service providers in attempting to meet the needs of handicapped individuals is the scarcity of information regarding these youth once they leave or graduate from high school (Donnellan, 1984). Little data are available regarding handicapped young adults and their integration within the world of work or within their community following high school. The purposes of this study were to describe the employment status of handicapped students, their satisfaction with their jobs if employed, and their satisfaction with their high school program. The study also examined the network by which jobs were obtained as well as provided data regarding the social activities and integration of the handicapped students within the community. A major goal of this study was to provide vocational data and other pertinent information needed to fill the void documented in current vocational literature.

Former handicapped high school students enrolled in the 12th

grade in the 1983-84 academic year were divided into two groups according to the type of program in which they were assigned and the level of special education services which they received. One group received level I-III special education services from 1-3 hours per day in a regular classroom setting. The second group received level IV special education services in a self-contained classroom setting. Students enrolled in level IV programs also participated in a workstudy component in the 11th and 12th grades.

Handicapped students in both groups had unemployment rates comparable to their normal peers on the national and state level. On the local level, however, the unemployment rate of the handicapped individuals was almost twice as high as their nonhandicapped peers. Level I-III and level IV handicapped males were more likely to be employed than their female counterparts. Respondents in both groups who had summer jobs or other work experiences during the year were more likely to be employed than those who did not have these work experiences. In general, most handicapped individuals in both groups were satisfied with their jobs and relied heavily upon a "self-family-friend network" to find employment. In both groups the majority of respondents were employed and met the criteria for a positive employment outcome. Regardless of employment status, respondents in both groups expressed satisfaction with their high school program.

Concerning postschool social adjustment factors, most handicapped individuals were single and resided with their parents. Handicapped respondents in both groups engaged regularly in a

variety of social activities with friends and family members and, for the most part, expressed satisfaction with their social life. Regardless of group, the majority of handicapped respondents reported that they did not pursue postsecondary training or education.

Limitations and Strengths of the Study

Before addressing the implications of these findings, the limitations and strengths of this study will be discussed briefly. One limitation of this study was that it did not include a control group of nonhandicapped participants. Inclusion of a normal control group would have enabled comparisons of employment and postschool social adjustment data to ascertain how well the handicapped respondents fared in comparison to their normal peers. Another limitation was the time frame for the follow-up study. The study was undertaken only two years after the handicapped students were enrolled in the 12th grade. A longitudinal design incorporating several data collection points on these former students five or more years after leaving high school may well produce very different results from the present study as well as add to the data base regarding the integration of the handicapped into the business and social community. For example, it may be that the generally positive results regarding employment may be mitigated after several years in the work force.

A limitation discussed in Chapter 1 was the generalizability of the study. This study was limited to respondents identified as mildly handicapped who were enrolled in the 12th grade in the 1983-84 academic year in a county school system which was located

in the Washington metroplitan area. The study was further limited to the participants' responses regarding their post high school employment and social outcomes as well as the respondents' perceptions of their high school training, their jobs, and their social life. No attempts were made to validate their perceptions either through interviewing family members or employers. The findings cannot be generalized to all mildly handicapped students because the respondents in this study had attended twelfth grade in high school with over 95% graduating, and were not enrolled in a competency based high school program. Thus the sample for this study represented a subgroup of mildly handicapped individuals who perhaps had a more successful high school experience than is generally found in samples of individuals who did not attend twelfth grade or graduate.

Strengths of the study included the random selection of students from each of the two groups to be interviewed and the high percentage (over 70%) of interviews obtained, and the high percentage of personal vs telephone interviews conducted. The results of this study were more likely to be representative of the employment and social outcomes for handicapped students in the geographical area studied than the results of studies that have not used this method of selection. Another strength was the use and conformity to federal government and the Bureau of Labor Statistics definitions for employment, unemployment, not in the labor force, and other key concepts related to employment variables. These definitions were more precise than those used in earlier studies and provided points of reference for comparisons to nonhandicapped peers on the national, state, and local levels.

A methodological strength of this study was the development of a reliable instrument which could be used to survey mildly handicapped individuals regarding their post high school employment and social outcomes. As previously discussed, satisfactory interrater reliability coefficients were obtained throught data collection activities. Previous studies (Colorado Follow-up Study, 1985; Vermont Follow-up Study, 1985) have not reported the psychometric properties of the instrument used.

Conclusions and Implications for Future Research

The findings of this study will be discussed from the perspective of how these results are similar to or different from past studies. In addition, recommendations for future research will be suggested.

In general, the similarities with past studies were identified regarding the following variables: employment and satisfaction with their job, high school program, and social life. This study differs from previous research on employment outcome, social outcomes and post high school training. It also differs from previous studies in that an instrument with documented reliability was used. In addition, this instrument included items which sought to further clarify individual responses regarding employment and social outcomes which provided a more well-rounded and complete view of outcomes.

By comparing these data to past studies some inferences can be drawn regarding the employment and social outcomes of mildly handicapped individuals. It should be noted that these comparisions are relative given that inferential statistics were not used. In regard

to employment outcomes comparisons of data from the present study with those of the Colorado Follow-up Study (1985) and the Vermont Follow-up Study (1985) showed an increase in the number of handicapped individuals currently employed. Both the Colorado and the Vermont Follow-up Studies reported lower percentages of respondents employed on a full time basis (33%, Colorado Follow-up Study; 67%, Vermont Follow-up Study) than the present study (Level I-III, 75.9%; Level IV; 80.4%). The majority of both level I-III and level IV respondents also met the criteria for a positive employment outcome. This criteria included employment on a full time or part-time basis for minimum wage or better for a duration of six months or longer. The inclusion of this composite variable was one way in which this study differed from earlier research. It is recommended that other studies use a similar composite variable to capture the multifaceted aspects of employment outcomes.

The unemployment rate of handicapped respondents in both groups was comparable to those of their nonhandicapped peers on a national and state level. However, it was almost twice that of the local normal population. In a metropolitan area with low unemployment rates of 6.7% for those aged 20-24 and 3.1% for all adults aged 16 and over, the unemployment rate of handicapped individuals (level I-III, 13%; level IV, 12.3%) remains high. In spite of working for minimum wage or better many employed handicapped individuals indicated that they resided with their parent/guardian. This dependence on parents/guardians was not surprising when several factors are considered. An individual employed fulltime (35hours/week) at

minimum wage ($3.35) earns only $6,097 a year before taxes. At the other end of the income spectrum, an individual earning $5.00 per hour at a fulltime position has a gross income of only $9,100 per year. An average income computed using both these reference points is $7,598 per year. Estimated poverty threshold income for a single person is $5,574 (State of Maryland, Department of Employment and Training, 1985). Therefore many of the incomes of the handicapped individuals surveyed hover near the poverty threshold. Compounding this finding is the high cost of living index in the metropolitan area where the average apartment rental is $430 per month (Apartment and Office Building Association Survey, 1983). These data provide a partial rational as to why individuals earning marginal incomes appear unable to establish themselves as financially independent. In fact, the majority of respondents indicated that they would prefer to live independently but could not do so because of financial constraints. A pattern of family dependence and financial instability reported in previous studies seems to persist.

In the area of job classification this present study found that the largest percentages of handicapped individuals in both groups are employed in sales/clerical positions and service positions. Of level I-III respondents, 40.7% were employed in sales/clerical positions and 14.8% were employed in service occupations. Level IV respondents reflect a similar pattern in that 22.4% worked in the area of clerical/sales and 22.4% worked at service occupations. These findings were similar to the Vermont Follow-up Study (1985) which reported that the highest percentages of those surveyed

were engaged in clerical or sales occupations while the lowest percentage were employed in professional or managerial positions. Earlier research studies (Carriker, 1957; Cassidy & Phelps, 1955; Dinger, 1958; Kennedy, 1962) indicated that this finding regarding the types of employment has remained unchanged for over 30 years.

A finding that is related to the type of job these subjects held is the skill level of the position. Over 92% of the level IV respondents and 96% of the level I-III respondents worked at unskilled or semi-skilled positions. These findings are consistent with those of earlier research (Carriker, 1957; Cassidy & Phelps, 1955; Dinger, 1958; Kennedy, 1962) which reported that most respondents performed unskilled or semi-skilled labor. Typically, these positions pay poorly and appear to contribute to the financial dependence of handicapped individuals on others for support.

Taken together, several implications can be drawn from the data that indicated the handicapped individual is most likely to be employed in a sales/clerical or service occupation in a unskilled or semi-skilled position. Skill development might assist handicapped individuals to achieve financial independence. Handicapped individuals should be directed toward trade and industry or other vocational courses if appropriate, to provide the opportunity for continued vocational growth and advancement once they leave high school. Although entry level positions in the areas of clerical/sales and service may well provide valuable work experiences for students especially in workstudy programs, follow-up programs might provide assistance in student skill development which

might enable them to advance in these positions. Workstudy programs might be enhanced by emphasis on the development of entry level positions and placements in a greater variety of occupational areas. In essence, transitional programs might foster the skill development of handicapped individuals upon leaving high school and assist them in progressing from entry level positions to those demanding more skills and expertise.

The findings of this study also suggested that handicapped women fared poorly in terms of employment when compared to their handicapped male peers. In both groups men appeared more likely to be employed than women (level I-III, 80.8% of the men employed compared to 40% of the women, level IV, 90.9% of the men employed compared to 52.4% of the women). This finding is similar to the findings of earlier studies (Hasazi, Gordon & Roe, 1985; Hasazi, Gordon, Roe, Finck, Hull & Salembier, 1985). The unemployment rate of handicapped females is also much higher than the low 6.1% rate for women between the age of 20 and 24 (Maryland Department of Employment and Training, 1980).

The reasons for this discrepancy cannot be determined by the results of this study but it does not appear to be the result of marital status. Whether single or married the employment rates did not vary appreciably and very few respondents were married. Hasazi et al. (1985) speculated that the expectations for young women with handicaps and the training and vocational experiences which they receive may be different from those for handicapped males. An important issue for future research will be to ascertain

the factors which contribute to the high unemployment rate of women.

Work experiences during high school also emerged as an important factor which may be related to the subsequent employment of respondents. In both groups, students who *had* summer jobs and/or work experiences during the school year appear more likely to be employed than those who did not. These findings are similar to those of earlier studies (Hasasi, Gordon, & Roe, 1985; Hasazi, Gordon, Roe, Fink, Hull & Salembier, 1985) which reported a correlation between summer employment and current employment status. Before programmatic recommendations can be made, further investigation is needed to determine which of a variety of factors contribute to this correlation (e.g., family status, socio-economic status, parental support, intelligence, interpersonnal skills, program, experience, etc.). Although it seems reasonable that prior work experiences will predict future employment status, it is imperative to identify the variables that mediate this connection.

One interesting finding concerning level IV respondents is that 64.1% left their workstudy job upon completion of high school. Although several respondents indicated that they had to leave their workstudy job because it was designated as a school training position, most left voluntarily. This finding may suggest that these students had developed skills which enabled them to terminate their workstudy job and obtain a new one. Informal notes from interviewers suggest that many of these students indicated that they left their workstudy job to get a better job. At the present only speculations can be made.

In regard to job satisfaction the majority of both groups (Level I-III, 89%; Level IV, 90.2%) indicated that they were satisfied with their job. These percentages were higher than those reported in earlier studies (Brolin, Durmond, Kromer, & Miller, 1974; Boyce & Elzey, 1978; Mithaug, Horiuchi, & Fanning, 1985) but similar in that the majority of respondents were satisfied with their jobs.

Handicapped individuals in both groups regardless of employment status rated their high school programs highly. As noted earlier in Chapter 4, other studies investigating satisfaction with high school programs found similar results. (Mithaug, Houriuchi, & Fanning, 1985; Powers & Lewis, 1976). The present study reported that 84.6% of level IV respondents and 80.4% level I-III respondents were satisfied with their high school program. These percentages were higher than the 69% reported in the Colorado Follow-up Study (1985) and the 68% reported by Powers and Lewis (1976).

It is difficult to assess what this finding of general satisfaction means. Perhaps handicapped individuals embrace the philosophy that any job is better than no job. High job satisfaction ratings might have been part of their eagerness to please the interviewers and provide the feedback which they thought was being solicited. Perhaps the satisfaction is genuine. In any event, these handicapped respondents appear to like what they do and the people with whom they work.

Respondents also indicated that they use a "self-family-friend network" to secure employment. Respondents from both groups relied heavily on this network to find jobs since leaving high

school. Hasazi, Gordon, & Roe (1985) who reported similar findings regarding the 'self-family-friend network' suggested that this is an area that should be considered in designing curriculum for high school programs. Such a curriculum called "Job Clubs" has been designed by Azrin and Besalele (1980). "Job Clubs" provide a systematic procedure for teaching job seekers how to identify and use their self-family-friend network. Although this program has been used primarily with adults, an adaptation for level I-III, resource students, and level IV, self-contained students appears to be a promising curriculum component addition.

Data on the use of community and service agencies indicated that 63% of level I-III respondents and 37% of level IV respondents had not contacted any of the listed agencies when seeking employment including: vocational rehabilitation, state employment agencies, government programs, private and non-profit organizations. In general, the data regarding the use of community and service agencies were similar to the findings of the Colorado Follow-up Study (1985) and the Vermont Follow-up Study (1985). Level IV respondents in the present study reported a higher contact rate with vocational rehabilitation services (27.7%) than the Vermont Follow-up Study (11%) but less than that reported in the Colorado Follow-up Study (36% for workstudy respondents; 31% for self-contained classroom respondents).

Since such low percentages of respondents in both groups utilized these services several questions are raised. Perhaps respondents do not use service agencies because of the stigma traditionally attached to them. The lack of use may also be

attributed to previous bad experiences or unfamiliarity with them. A larger percentage of respondents especially level IV respondents used the services of vocational rehabilitation. The increased visibility and contact of the vocational rehabilitation counselor with the school system may have been a contributing factor. Also level IV students are usually referred to vocational rehabilitation in the 12th grade if deemed appropriate. Whatever the reason, high school programs might consider incorporating these service agencies within the curriculum. Students and parents should be made aware of community and service agencies availabe to them before leaving high school. Knowledge of these agencies and the services they provide may lessen the stigma attached to them, increase their use by handicapped young adults, and provide another means of finding employment.

Most of the findings regarding postschool social adjustment provide baseline data regarding the mildly handicapped. Further research is suggested especially studies which include normal same age peer control group. A normal control group would provide points of comparison to ascertain whether the patterns depicted in the data for handicapped students reflect those of the norm or vary from it.

Although little comparative data are available, several findings require discussion. In both groups the majority of respondents were single (level I-III, 93.5%; level IV, 96.9%). These figures were much higher than the national data (U.S. Bureau of Census, 1985) for singles (females 58.5%; males 75.6%) for the age group 20-24 and higher than those reported by the Colorado Follow-up Study (1985). It is not clear why the marriage rate in this sample is so low.

The findings from this study imply that financial dependence may be a contributing factor. Further research is needed to determine if this result is limited to the particular sample studied or is reflective of mildly handicapped persons in general.

Another postschool social adjustment variable which this study examined was place of residence. The majority of both groups (Level I-III, 82.6%; Level IV, 83.1%) reported that they lived with their parents/guardians. These findings were consistent with those of earlier research (Connely, 1980; Gonzali, 1972; Saenger, 1957) that reported that the majority of respondents lived at home. The present study's results were higher than those reported in the Colorado Follow-up Study (1985) and the Vermont Follow-up Study (1985) which indicated that 64% of the respondents resided at home. Respondents in the present study reported that although they lived with their parents they did so because of financial constraints and preferred to live independently. It is recommended that future studies also explore the reasons for current residential status to determine if the pattern of financial dependence identified in this study obtains across different samples in a variety of geographical areas.

Responses to items questioning satisfaction with social life produced results which are of interest. Although the majority of students in both groups expressed satisfaction with their social life (level I-III, 78.3%; level IV, 66.1%) a sizable proportion of the groups also noted dissatisfaction (level I-III, 17.4% level IV 29.3%). These results are similar to but higher than those of the

of the Colorado Follow-up Study (1985) which indicated that the majority of subjects (64%) were satisfied or very satisfied with their life. The Colorado Study also reported a lower percentage of respondents who were dissatisfied with their social life (13%) than the present study.

This study differs from earlier research in that it attempted to probe deeper in order to ascertain which aspects of the respondent's social life were most rewarding and which aspects needed to be improved according to the respondent's perceptions. In both cases money and friendship rated highest as the best aspects of their social life and also the aspects which needed to be improved. Responses to items involving social activities and their frequency also provided baseline date regarding handicapped young adults. Further follow-up research with normal peers will assist interpretation of these data.

This study also differs from earlier research in the area of post high school training. Small percentages of both groups reported having pursued further training since leaving high school (level I-III 36%; level IV, 40%). These findings were lower than those reported by the Colorado Follow-up Study (1985) which indicated that 50% of those interviewed enrolled in classes after high school. The results were similar, however, to those reported in a follow-up study of learning disabled individuals by Buchanan and Wolfe (1985) which indicated that only 39% of those surveyed had pursued postsecondary training.

The infrequency with which respondents pursued post high school

training seems incongruous in light of the provisions of PL 94-142. Many of the respondents in the present study ended their education with high school graduation despite the provisions of Public Law 94-142 to provide free and appropriate education until student's twenty-first birthday. It appears reasonable that appropriate education between the ages of 18-21 would be job and living assistance. The need for transition programs seems apparent. Many of the unemployed and underemployed handicapped individuals might be able to find employment and training through a well-coordinated transition program. Those employed might benefit from receiving further training which might enhance their skill development and enable them to advance within a chosen field. Concomitant with advancement and skill development might be increased independence. This transitional assistance might be provided by the school system or a community based program at the community college/center offering on-the-job training, social skill and work adjustment training and living assistance. Recent research (Martin, Schneider, Rusch, & G eske, 1982; Schalock, 1986) suggests that such support systems are effective in assisting handicapped young adults make a smooth transition from school to work. Transition programs might assist the handicapped young adult achieve parity with their nonhandicapped peers in terms of employment.

In conclusion, there are several implications for future research identified in this study. Research is needed to investigate reasons for the handicapped females' unemployment rate, the residential

status and marital status of handicapped individuals, and the relationships between work experiences during high school and the current employment status of handicapped adults. In the area of postschool social adjustment, studies which include a normal control group for comparison are recommended.

The results pertaining to the handicapped individual's job classification and skill level also had several implications. Skill development through transitional programs was suggested as a means to assist handicapped individuals in progressing from entry level positions to those positions demanding more skill, expertise, and paying higher wages.

These recommendations are supported by recent legislation enacted after this study was undertaken. The 1983 Amendments to the Education of the Handicapped Act Amendments of 1973 (PL 98-199) and the Carl D. Perkins Act (PL 98-524) demonstrated Congress' commitment to the follow-up of the handicapped and the provisions of transitional services for handicapped adults. For example, Section 626 of Pl 98-199 provides for the development of training and related service programs to assist youth in the transition to postsecondary education, competitive employment or adult services. Section 204 of the Carl D. Perkins Act guaranteed that handicapped individuals have equal access to the full range of vocational programs including the transitional programs developed by PL 98-199. The Carl D. Perkins Act also addresses the need for periodic and systematic follow-up of the handicapped program completers and leavers through the establishment of a national vocational data system.

The results of this study can be interpreted as providing support for the recommendations of these pieces of legislation. Although the majority of respondents experienced a positive employment outcome, a pattern of underemployment and financial dependence emerged indicating the need for handicapped individuals to have access to the full range of vocational opportunities including transitional programs. These programs might assist handicapped individuals in the area of competitive employment through skill development. The study also provides much needed follow-up data regarding handicapped persons. This information contributes to the vocational data base established by PL 98-524. The study also serves as a building block in the development of reliable and systematic data collection methods. The next section of this chapter discusses these methodological recommendations.

Methodological Recommendations

While undertaking this follow-up study the need for a systematic means of data collection became apparent. At the onset of the study the researcher attempted to secure valid data regarding the location of the students who were members of the two groups in question. Few relevant and comprehensive follow-up data were available. Although school officials were cooperative and eager to assist the researcher, a comprehensive system for tracking students was not in place. Admittedly, this is a difficult task given the transient nature of many of the students. Hours were spent trying to locate students using a network of former teachers and friends as well as directory assistance or through solicitation within the neighborhood.

Once located, it was necessary to maintain contact via frequent communication by phone or mail in order to secure the student's participation. On the positive side, training interviewers who were special education teachers and obtaining high rater reliability estimates were relatively problem free.

The initial difficulties encountered during this study might be alleviated by establishing a follow-up study procedure in the county. For instance, high school aged special education students and parents might be made aware of the need for follow-up data and familiarized with follow-up procedures through a seminar or training session. At this meeting, confidentiality of results and the anonymity of the subject would be discussed. Permission slips for participation would also be signed. Parents and students would be informed that periodically, perhaps on a quarterly basis, a contact would be made by mail or phone to update addresses and phone numbers. Follow-up data might be collected by school based personnel such as teachers or counselors on a yearly basis using the developed survey instrument. Each school might furnish its results to the Special Education Placement Office to be compiled into a data base. The results might be used for decision making regarding school curriculum or to assess how former students are adjusting to postschool life. Students experiencing difficulties might be referred to a transition program for further evaluation or assistance.

In conclusion, one of the major goals of this study was to use a systematic method of data collection to obtain a comprehensive view of employment and social outcomes of handicapped students

after their exit from high school. The present findings in conjunction with other relevant research suggest that follow-up should be an on-going process undertaken periodically. Since this follow-up study was conducted two years after the respondents exited school, it would be important to survey the same students in five or ten years after high school to assess the employment status of handicapped adults and their social intergration.

Follow-up studies need to be viewed as part of an on-going process of evaluation designed to improve service delivery. They are a tool to help identify components which have a positive impact and those which need to be reasessed if long term educational goals are to be achieved (Mithaug, Horiuchi, & Fanning, 1985).

The present study provided descriptive data regarding employment and social outcomes of mildly handicapped students following their exit from high school. While some questions were answered regarding the status of these students, many important questions remain unanswered. Future research should address the reasons for differential employment rates between handicapped and nonhandicapped individuals, ascertain if those handicapped students maintained their positive employment outcome and assess the social integration of the handicapped compared with their nonhandicapped peers.

APPENDIX A

Percentage of Responses to Items on Job Satisfaction by Level IV Respondents

Variable	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Job	62.7	27.5	9.8	0.0	0.0
Salary	47.1	23.5	5.9	17.6	5.9
Benefits	52.3	22.7	2.3	18.2	4.5
Potential for Advancement	52.0	18.0	6.0	16.0	8.0
Boss/Supervisor	70.0	22.0	4.0	2.0	2.0
Coworkers	82.0	14.0	2.0	2.0	0.0
Pace/Rate	68.0	16.0	4.0	10.0	2.0
Equipment	74.0	20.0	2.0	0.0	4.0
Working Conditions	74.0	18.0	4.0	4.0	0.0
Variety	74.0	20.0	0.0	4.0	2.0
Security	70.0	18.0	4.0	4.0	4.0
Safety	78.0	20.0	2.0	0.0	0.0

APPENDIX B

Percentage of Responses to Items on Satisfaction with High School Training by Level IV Respondents

Variable	All Level IV Students	Employed	Not Employed
Preparation to find a job			
Well Prepared	32.3	31.4	35.7
Somewhat Prepared	56.9	58.8	50.0
Unsure	1.5	2.0	14.3
Not Well Prepared	4.6	5.9	0.0
Unprepared	4.6	2.0	0.0
Preparation for Job Market			
Well Prepared	27.5	27.7	28.6
Somewhat Prepared	56.9	58.8	50.0
Unsure	1.5	2.0	0.0
Not Well Prepared	9.2	11.8	0.0
Unprepared	4.6	0.0	21.4

APPENDIX C

Percentage of Responses to Items on Seven Social Activities by Level IV Respondents

Activity	Response		Frequency/Month					With Whom			
	No	Yes	1	2	3	4	4+	Alone	Family	Friend	Team
Church	36.9	63.1	19.5	2.4	2.4	65.9	9.8	0.0	83.3	16.7	0.0
Movies	9.4	90.6	49.1	30.9	5.5	10.9	3.6	0.0	14.0	86.0	0.0
Watch T.V.	0.0	100.0						28.6	58.7	12.7	0.0
Hobby	60.9	39.1	12.0	12.0	0.0	20.0	56.0	80.0	8.0	12.0	0.0
Sports	56.9	43.1	3.6	10.7	10.7	32.1	42.9	3.6	0.0	67.9	28.6
Recreation Center	54.7	45.3	13.8	6.9	3.4	58.6	17.2	3.4	3.4	93.7	0.0
Hangout	58.5	41.5	2.7	7.4	3.7	48.1	37.0	14.8	0.0	85.2	0.0

APPENDIX D

Percentage of Responses to Items on Job Satisfaction by Level I- III

Responoents

Variable	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Job	69.0	20.7	6.9	3.4	0.0
Salary	31.0	48.3	3.4	13.8	3.4
Benefits	30.8	50.0	7.7	7.7	3.8
Potential for Advancement	18.5	40.7	11.1	25.9	3.7
Boss/Supervisor	41.4	34.5	24.1	0.0	0.0
Coworkers	48.3	44.8	6.9	0.0	0.0
Pace/Rate	34.5	48.3	6.9	10.3	0.0
Equipment	48.3	27.6	17.2	6.9	0.0
Working Conditions	48.3	27.6	17.2	6.9	0.0
Variety	48.3	31.0	6.9	13.7	0.0
Security	50.0	39.3	3.6	7.1	0.0
Safety	48.3	37.9	6.9	6.9	0.0

APPENDIX E

Percentage of Responses to Items on Satisfaction with High School Training by Level I-III Respondents

Variable	All Level I-III Students	Employed	Not Employed
Preparation to find a job			
Well Prepared	15.2	20.7	5.9
Somewhat Prepared	65.2	62.1	70.6
Unsure	10.9	13.8	5.9
Not Well Prepared	8.7	3.4	17.6
Unprepared	0.0	0.0	0.0
Preparation for Job Market			
Well Prepared	13.0	20.7	0.0
Somewhat Prepared	60.9	58.6	64.7
Unsure	8.7	3.4	17.6
Not Well Prepared	15.2	13.8	17.6
Unprepared	2.2	3.4	0.0

APPENDIX F

Percentage of Responses to Items on Seven Social Activities by Level I-III Respondents

Activity	Response		Frequency/Month					With Whom			
	No	Yes	1	2	3	4	4+	Alone	Family	Friend	Team
Church	48.9	51.1	26.1	26.1	4.3	43.5	0.0	0.0	100.0	0.0	0.0
Movies	20.0	80.0	75.0	16.7	5.6	2.2	0.0	0.0	13.9	86.1	0.0
Watch T.V.	4.3	95.7						50.0	28.3	18.2	0.0
Hobby	54.0	46.0	9.5	14.3	4.8	14.3	57.0	73.0	0.0	27.0	0.0
Sports	61.0	39.0	0.0	5.6	5.6	27.8	61.0	0.0	0.0	52.6	47.4
Recreation Center	65.0	35.0	5.9	5.9	5.9	47.1	35.3	11.8	0.0	88.2	0.0
Hangout	43.5	56.5	15.4	26.9	34.6	11.5	11.5	0.0	0.0	100.0	0.0

APPENDIX G

PERSONAL INTERVIEW/TELEPHONE SURVEY OF 12th GRADE STUDENTS
of SPECIAL SERVICES and VOCATIONAL PROGRAMS
David Scuccimarra - University of Maryland

I. Directions: Items 1 through 8 are to be completed by the interviewer prior to the interview.

(01-03) 1. Student Indentification _____.

(04) 2. Program/Level of service

_____1. level I

_____2. level II

_____3. level III

_____4. level IV

(05) 3. Program placement (most recent)

_____1. Resource Room/Multi-Level Service

_____2. Vocational Development Work-study Program

(06) 4. Gender

_____1. Female

_____2. Male

(07) 5. Georgraphic location of school

_____1. Northern (suburban)

_____2. Southern (rural)

---

(08) 6. Interviewer Code _____

(09-14) 7. Interview Completed: _____/_____/_____
month day year

(15) 8. No Interview because:

_____1. unable to locate _____3. refused to answer

_____2. no response _____4. other

List reason:

_____

_____

(16) 9. Are you presently employed?

_____1. No

_____2. Yes

If the subject is employed continue with questions 10-19. If the subject is not employed skip to question 20.

(17-18) 10. What is your job title and duties?

__ __ 1st job _____

(19-20) 2nd job _____

__ __ (Interviewer transforms to a DOT Code)

DOT Codes

10 - Professional, technical, and managerial

20 - Clerical and sales

30 - Service occupations

40 - Agriculture, fishery, forestry, and related work

50 - Processing occupations

60 - Machines and trades

70 - Benchwork occupations

80 - Structural work occupations

90 - Miscellaneous

(21) 11. Skill class of present job (completed by interviewer)

_____1. Semi-skilled

_____2. Skilled

_____3. Unskilled

(22-23) 12. How many hours per week do you work in total?

_____ hours/week

(24) 13. Is your job _____

_____ 1. Full-time (35hrs/week or more)

_____ 2. Part-time (21-34 hrs/week)

_____ 3. Part-time (less than 21 hrs/week)

(25) 14. Is your job _____.

_____ 1. Permanent (same site for a long period of time regular hours each week)

_____ 2. Seasonal (Christmas or summer employment)

_____ 3. Temporary (hired for short periods of time)

(26) 15. How long have your worked at this job?

_____ 1. week or less

_____ 2. more than a week but less than 1 month

_____ 3. more than one month but less than 6 months

_____ 4. more than 6 months but less than 1 year

_____ 5. more than one year but less than 3 years

_____ 6. I don't know

(27) 16. Is your job subsidized by the government or another agency?

_____ 1. No

_____ 2. Yes

_____ 3. I don't know.

(28) 17. What is your present salary per hour?

_____1. $ 0- 3.34

_____2. $ 3.35 (minimum wage)

_____3. $ 3.36 -5.00

_____4. > $ 5.01

_____5. By the job $_____

_____6. I don't know

(29) 18. How do you feel about your present job?

_____ 1. I like it very much.

_____ 2. I like it somewhat.

_____ 3. I neither like it nor dislike it.

_____ 4. I dislike it somewhat.

_____ 5. I dislike it very much.

(30-40) 19. How do you feel about the following characteristics or aspects of your job?

KEY: 1. I am very satisfied.
2. I am somewhat satisfied.
3. I am neither satisfied nor dissatisfied.
4. I am somewhat dissatisfied.
5. I am very dissatisfied.

(30) _____ a) salary (wages or pay)

(31) _____ b) benefits (paid vacation, sick leave, medical insurance)

(32) _____ c) potential for advancement (raises, more responsibility)

(33) _____ d) supervision/management (boss)

(34) _____ e) co-workers (people you work with)

(35) _____ f) pace or rate of work

(36) _____ g) facilities/equipment (machines, work area)

(37) _____ h) working conditions

(38) _____ i) variety of tasks (different things to do)

(39) _____ j) job security

(40) _____ k) safety conditions

<<SKIP TO ITEM #26 IF THE PERSON IS WORKING>>

(41) 20. If you are not working is it because you are _____.

_____ 1. a homemaker

_____ 2. full time student.

_____ 3. in a job training program

_____ 4. disabled and receiving SSI benefits

_____ 5. unable to find work

_____ 6. other, list _____

(42) 21. Are you looking for work?

_____1. NO <<ask # 22 then skip to 25>>

_____2. Yes << Skip to #23>>

(43-50) 22. If you wanted to look for work, how would you go about it? Who if anyone would help you? Check all that apply.

(43) _____1. myself

(44) _____2. my parent or relatives

(45) _____3. my teachers

(46) _____4. my counselor

(47) _____5. my friends

(48) _____6. a vocational rehabilitation counselor

(49) _____7. a state employment agency

(50) _____8. other, please list _____.

(51-58) 23. If you are looking for work who if anyone is helping you? Check all that apply.

(51) _____1. myself

(52) _____2. my parent or relatives

(53) _____3. my teachers

(54) _____4. my counselor

(55) _____5. my friends

(56) _____6. a vocational rehabilitation counselor

(57) _____7. a state employment agency

(58) _____8. other, please list _____.

(59) 24. If you are currently looking for a job, why do you think that you are unable to find one? _____

_____

Interviewer rates reason according to the locus of control.

KEY: 1. external (blames others, jobs not good enough)

2. internal (blames self, lack of skills)

(60) 25. How long have you been looking for work?

_____ 1. week or less

_____ 2. more than a week but less than 1 month

_____ 3. more than one month but less than 6 months

_____ 4. more than 6 months but less than 1 year

_____ 5. more than one year but less than 3 years

_____ 6. I don't know

Directions: All subjects are to be asked the following questions.

(61) 26. Marital status. Which describes your present marital status?

_____1. single
_____2. married
_____3. separated
_____4. divorced
_____5. widowed
_____6. other

(62) 27. Do you have children?

_____1. No
_____2. Yes

(63) How many children do you have? _____ number

(64) 28. Which of the following fits closest to where you live?

_____1. with your parents/guardians
_____2. with your spouse's (husband/wife) parents
_____3. living independently (single)
_____4. living independently (married)
_____5. in a group home
_____6. in a supervised apartment
_____7. other, please list _____.

(65) 29. Would you rather live at home or independently?

_____1. home
_____2. independently

(66) 30. If you live at home which reason best describes why?

_____1. expense of living independently
_____2. choice
_____3. attending school
_____4. saving money to buy a car etc.
_____5. raising a child/need child care

(67-70) 31. What do your parents/guardians do for a living?

(67) _____a) father _____

(68) _____b) mother _____

(69) _____c) guardian _____

(70) _____d) guardian _____

Interviewer will code using the key below.

KEY: 1- semi-skilled 6- disabled

2- skilled 7- retired

3- *unskilled* 8- deceased

4- unemployed 9- homemaker

5- not in labor force Z- NA (not applicable)

(71) 32. Do you have a driver's license?

_____1. No

_____2. Yes

Now I am going to ask you some questions about what you do in your free or leisure time. In your free time which of these activities do you participate?

(72) 33. Do you attend church?

_____1. No

_____2. Yes

(73) a) How often do you attend?

_____1. once a month

_____2. twice a month

_____3. three times a month

_____4. four times a month

_____5. >four times a month

(74) b) When you go to church do you attend mostly

_____1. alone

_____2. with your family

_____3. with your friends

(75) 34. Do you go to movies?

_____1. No

_____2. Yes

(76) a) How often do you go to the movies?

_____1. once a month

_____2. twice a month

_____3. three times a month

_____4. four times a month

_____5. >four times a month

(77) b) When you go to the movies do you go mostly

_____1. alone

_____2. with your family

_____3. with your friends

(78) 35. Do you watch T.V.?

_____1. No

_____2. Yes

Card #2
(01-02) a) How many hours per day do you watch T.V.?

____ _____ hours/day

(03) b) Do you watch T.V. mostly

_____1. alone

_____2. with your family

_____3. with your friends

(04) 36. Do you have a hobby?

_____1. No

_____2. Yes

Name _____

a) How often do you work at your hobby?

(05)

_____1. once a month

_____2. twice a month

_____3. three times a month

_____4. four times a month

_____5. <four times a month

(06) 36. b) Do you work at your hobby _____

_____1. alone

_____2. with your family

_____3. with your friends

(07) 37. Do you participate in sports?

_____1. No

_____2. Yes

_____
name of sport(s)

(08) a) How often do you play the sport?

_____1. once a month

_____2. twice a month

_____3. three times a month

_____4. four times a month

_____5. >four times a month

(09) b) When you play do you do so mostly _____.

_____1. alone

_____2. with your family

_____3. with your friends

_____4. with an organized team

(10) 38. Do you go to the recreation center in your neighborhood?

_____1. No

_____2. Yes

(11) a) How often do you go to the recreation center?

_____1. once a month

_____2. twice a month

_____3. three times a month

_____4. four times a month

_____5. >four times a month

(12) 38. b) Do you go to the recreation center mostly _____.

_____1. alone

_____2. with your family

_____3. with your friends

(13) 39. Do you "hang-out" (gather in the mall, neighborhood or meet at one place).

_____ 1. No

_____ 2. Yes

(14) a) How often do you "hang-out"?

_____1. once a month

_____2. twice a month

_____3. three times a month

_____4. four times a month

_____5. >four times a month

(15) b) When you "hang-out" do you do so mostly _____.

_____1. alone

_____2. with your family

_____3. with your friends

(16) 40. Do you have any special friends now?

_____1. No

_____2. Yes

(17) a) what are their names?

1._____

2._____

(18-22) b) Are these friends_____? Check all that apply.

_____1. teachers

_____2. counselors

_____3. co-workers

_____4. same age friends

_____5. family members

(23) 41. Are you satisfied with your social life and free time activities?

_____1. I am very satisfied

_____2. I am somewhat satisfied

_____3. I am neither satisfied nor dissatisfied.

_____4. I am somewhat dissatisified.

_____5. I am very dissatisfied.

(24) 42. What is the best feature (aspect or thing) about your social life?

_____1. friends

_____2. my girl/boy friend

_____3. my husband/wife

_____4. seeing my family

_____5. the fun I have

_____6. getting out of the house/apartment

_____7. the money I have to do what I want

_____8. there is no best feature

(25) 43. What could be better about your social life?

_____1. friends

_____2. having a girlfriend/boyfriend

_____3. husband/wife

_____4. seeing my parents

_____5. having more fun

_____6. getting out of the house/apartment

_____7. more money to do things

_____8. having more to do

_____9. everything is fine the way it is

Now I am going to ask you some questions about your high school program and past job experiences.

(26) 44. Did you have any summer jobs while you were in high school?

_____1. No <<SKIP TO ITEM #48>>

_____2. Yes, subsidized (i.e., SYETP, PIC, JPTA, 70,001 Club)

_____3. Yes, unsubsidized

(27-32) 45. What kinds of summer jobs did you have? (interviewer records job(s) and transforms to appropriate DOT code)

(27-28) ___ ___ 1._____

(29-30) ___ ___ 2._____

(31-32) ___ ___ 3._____

(33-35) 46. How long did your summer job(s) last?

KEY:

_____ Job #1
33

_____ Job #2
34

_____ Job #3
35

_____1. a week or less

_____2. two weeks

_____3. three weeks

_____4. four weeks

_____5. five weeks

_____6. six weeks or more

(36-38) 47. Was this summer job(s) _____.

_____ Job #1
36

_____ Job #2
37

_____ Job #3
38

_____1. full time (35 hrs/week or more)

_____2. part time (<35 hours/week)

_____3. part time (<21 hours/week)

(39) 48. Did you have any job experiences during high school other than workstudy and/or summer jobs?

_____1. No

_____2. Yes

(40-45) 49. What kind of jobs did you have? (interviewer records jobs and transforms to DOT Codes)

(40-41) __ __ 1._____

(42-43) __ __ 2._____

(44-45) __ __ 3._____

<<Ask question #50 only if subject was on workstudy>>

(46) 50. When you left high school, did you remain on your workstudy job?

_____1. No

_____2. Yes

(47) 51. When you exited from high school was it because _____.

_____1. you graduated (completed 12th grade)

_____2. you dropped out (exit school prior to 18 without graduating)

_____3. you left (exit school at 18 or older without graduating

_____4. you were asked to leave by the Board of Education

_____5. other, please list _____.

(48-52) 52. In attempting to secure training or employment since leaving high school, have you used any of the following: Check all that apply.

_____1. Vocational Rehabilitation

_____2. State Employment Agency

_____3. Government Programs (i.e., Job Corps, PIC, 70,001 Club)

_____4. Private Employment Agency

_____5. Non profit organization (i.e., LEAP, Good Will)

(53) 53. Rate your high school program according to how well you think it prepared you to find work after high school.

_____1. It prepared me very well.

_____2. It prepared me somewhat.

_____3. Undecided as how it prepared me.

_____4. It did not prepare me well.

_____5. It left me unprepared.

(54) 54. Rate your high school program according to how well you think it prepared you for the job market.

_____1. It prepared me very well.

_____2. It prepared me somewhat.

_____3. Undecided as how it prepared me.

_____4. It did not prepare me well.

_____5. It left me unprepared.

(55) 55. Since leaving high school, have you gone back to school or vocational center for more classes or training?

_____1. No << SKIP TO ITEM #58>>

_____2. Yes

(56-63) 56. Where did you go for this training/education?

Check all that apply.

_____1. a Vocational Center

_____2. a Community Center

_____3. Night school at the local high school

_____4. a Job training program (PIC, Job Corps, 70,001 Club)

_____5. an Apprenticeship program

_____6. Private non profit Agency (i.e., LEAP)

_____7. Vocational Rehabilitation (DVR)

_____8. Community College/College

(64-66) 57. What courses have you taken since leaving high school?

code

_____ (64) 1st course _____

_____ (65) 2nd course _____

_____ (66) 3rd course _____

Interviewer codes the classes using the following key.

KEY:
1. occupational home economics
2. trades and industry
3. agriculture
4. business education
5. health education
6. distributive education
7. other

(67-74) 58. When looking for a job who helped you most? Check all that apply.

_____1. myself
_____2. my parent or relatives
_____3. my teachers
_____4. my counselor
_____5. my friends
_____6. a vocational rehabilitation counselor
_____7. a state employment agency
_____8. other, please list _____.

(75) 59. Type of interview (completed by interviewer)

___ 1. personal
___ 2. telephone

Thank you so much for your help and cooperation during this interview.

Is there any thing that you would like to add at this time?

Comments_____

_____

_____

_____

APPENDIX H

Dear Parent/Guardian:

I am a special education teacher at _____ High School. As partial fulfillment of the requirements for my doctoral program, I have developed a follow-up survey which will provide information regarding the employment status and job satisfaction of graduates of vocational education programs in our county. In order to identify participants school records will be reviewed. Student records will be used to group participants according to the type of vocational program in which they were enrolled and/or the level of special education services which they received while attending high school.

The survey will involve a personal or telephone interview with your son/daughter. The length of the proposed interview will be one hour. I should like your son/daughter to participate in this survey and I am herewith requesting permission from you for your son/daughter to participate. Participants in the survey will not be identified and all results will remain anonymous. Please complete the form at the bottom of this letter and return it to me in the next ten days.

Please feel free to call me if you have any concerns or questions about this survey. I can be reached at school between 8:00 a.m. and 3:30 p.m. The school number is _____.

Sincerely,

David J. Scuccimarra

David J. Scuccimarra

****

(Place a check in one of the boxes, sign your name, and date of signing)

My son/daughter ☐ MAY PARTICIPATE IN MR. SCUCCIMARRA'S SURVEY

☐ MAY NOT

_____

Signature, Parent/Guardian Date

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